S
388.1
H3e15
75-01-F

A - MONT - EIS - 75-01-F
ERAL HIGHWAY ADMINISTRATION
ION 8

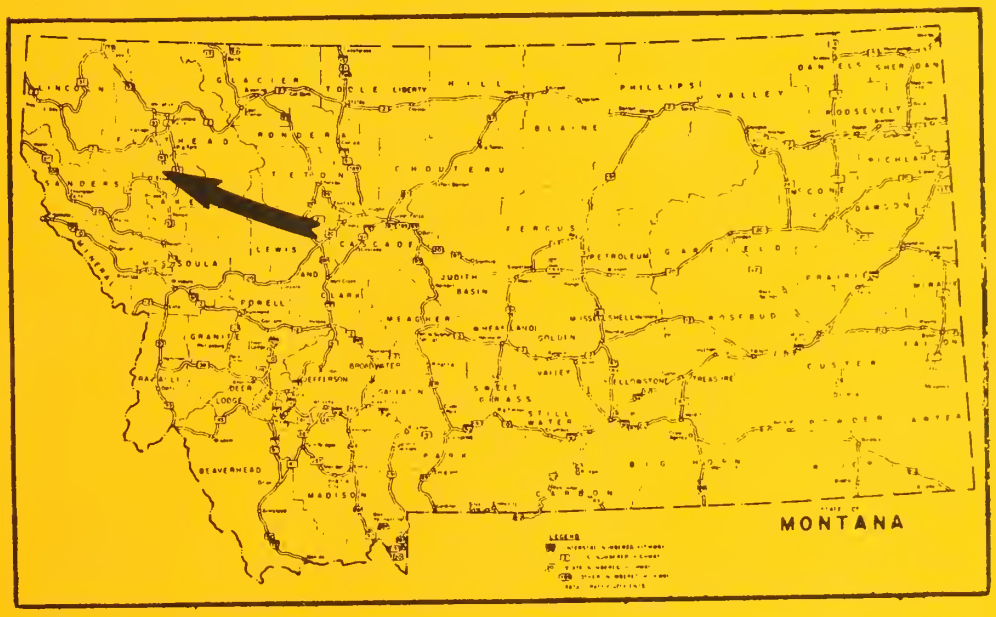
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 8

PREPARED BY
STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

ADMINISTRATIVE ACTION
FINAL
ENVIRONMENTAL STATEMENT

for

PROJECTS F-191 (15) and F-191 (30)
ELMO - ROLLINS
and
FLATHEAD COUNTY LINE SOUTH



THIS STATEMENT FOR THE IMPROVEMENT WAS DEVELOPED IN CONSULTATION WITH THE FEDERAL HIGHWAY ADMINISTRATION AND IS SUBMITTED PURSUANT TO 42 U.S.C. 4332 (2)(C) & 23 U.S.C.128 (a)

H. J. ANDERSON, DIRECTOR OF HIGHWAYS

By _____ 4-2-72
Jack R. Beckert, Administrator — Date
Engineering Division

APPROVED AND ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION

_____ _____
FEDERAL HIGHWAY ADMINISTRATION — Date
DIRECTOR, OFFICE OF
ENVIRONMENT & DESIGN

MONTANA STATE LIBRARY
S 388.1 H3eis c.1
Administrative action, final environment
3 0864 00023901 5

TABLE OF CONTENTS

Summary		Pages
I.	Type of Action	i
II.	Project Description	i
III.	Environmental Impacts	i - ii
IV.	Alternates	ii
V.	Distribution	iii - vi
VI.	Date Draft Statement Made Available to CEQ	vi
VII.	Subsequent Federal Actions Due to This Action	vi
Final Environmental Statement		
I.	Description of the Proposed Project and Their Surroundings	1 - 34
	A. Location	1 - 2
	B. Purpose	2 - 3
	C. History	3 - 4
	D. Traffic	4
	E. Scope of Work	4 - 5
	F. Existing Environment	5 - 34
	1. Land Use	5 - 16
	a. The Region	5 - 8
	b. Project Area	8 - 16
	i. Land Ownership	8 - 9
	ii. Existing Land Use	9 - 14
	iii. Land Use Planning	14 - 16
	2. Terrain	16
	3. Stream Crossings	16
	4. Geology	16 - 17
	5. Climate	17
	6. Population	17 - 20
	7. Economic Characteristics	21 - 30
	a. Family Income Distribution	21 - 23
	b. Labor Force and Employment	24 - 26
	c. Major Economic Industries	27 - 29
	8. Fish and Wildlife	30 - 32
	9. Vegetation	32 - 33
	10. Transportation Facilities	33
	11. Utilities	33 - 34
	12. Noise	34
	13. Air Quality	34
II.	Probable Environmental Impact	35 - 49
	A. Broad Impacts	36 - 42
	B. Impacts on the Narrow Band Adjacent to the Project	42 - 44
	C. Impacts to the Flathead Indian Reservation	45 - 49

III. Probable Adverse Environmental Impacts Which Cannot be Avoided - - - - - - - - - - - - - 50

IV. Alternates - 51 - 104

Alternate 1 - - - - - - - - - - - - - - - - - - 56 - 60
Alternate 2 - - - - - - - - - - - - - - - - - - 60 - 63
Alternate 3 - - - - - - - - - - - - - - - - - - 63 - 66
Alternate 4 - - - - - - - - - - - - - - - - - - 66 - 69
Alternate 5 - - - - - - - - - - - - - - - - - - 69 - 73
Alternate 6 - - - - - - - - - - - - - - - - - - 73 - 77
Alternate 7 - - - - - - - - - - - - - - - - - - 77 - 84
Selected Alternate - - - - - - - - - - - - - - - - - - 85 - 89
PTW Alternate - - - - - - - - - - - - - - - - - - 85 - 89
Hill Alternate - - - - - - - - - - - - - - - - - - 89 - 92
Modified PTW Alternate - - - - - - - - - - - - - - - - - - 92 - 95
No-Build Alternate - - - - - - - - - - - - - - - - - - 95 - 96

Summary - - - - - - - - - - - - - - - - - - 96

Route Selection Considerations - - - - - - - - - - - - - 101 - 103

V. The Relationship Between Local Short-Term Uses of Man's Environment and Maintenance and Enhancement of Long-Term Productivity - 104

VI. Irreversible and Irretrievable Commitments of Resources 105

VII. Coordination With Others - - - - - - - - - - - - - - - - 106 -134B

VIII. Comments From Other Agencies on Draft Environmental Impact Statement - - - - - - - - - - - - - 135 - 165

IX. Public Hearing Summary - - - - - - - - - - - - - - - - - 166

X. Exhibits - 168 - 172

SUMMARY SHEET

I. TYPE OF ACTION

(X) Administrative
() Draft
(X) Environmental Statement
() Combination Environmental/Section 4(f) Statement
() Legislative
(X) Final

II. PROJECT DESCRIPTION

For additional information on this project and environmental statement the following individuals should be contacted:

Mr. Stephen C. Kologi
Montana Department of Highways
6th and Roberts
Helena, Montana 59601

Mr. William S. Dunbar
Federal Highway Administration
501 N. Fee
Helena, Montana 59601

The projects covered by this Environmental Statement will involve the reconstruction of approximately 13.0 miles of U. S. Highway 93 on the west side of Flathead Lake between Polson and Kalispell. The Elmo-Rollins project, F191 (15), which is the southernmost project, starts about 2.5 miles northeast of the small community of Elmo, proceeds northeasterly for approximately 5.5 miles and ends northeast of Dayton. The Flathead County Line - South project begins at the end of the Elmo-Rollins project and proceeds northerly for about 7.5 miles to end at a point about 1 mile south of the Flathead - Lake County Line.

The chosen alignment for this project is shown on the Exhibits as a heavy solid line.

A 44-foot wide paved highway with two-12 foot driving lanes and 10-foot shoulders will be provided.

III. ENVIRONMENTAL IMPACTS

The major impact of these projects will be the provision of a safe and efficient highway facility to replace the narrow, dangerous roadway that now exists.

Further subdivision in the project area may occur as a result of the improved access. Also, the land that has already been subdivided may become more appealing to the public and easier to sell.

Some displacement of homes and businesses will be necessary, however, the exact number will depend on the final design. New right-of-way, including agricultural land, subdivided land, and private forested land will have to be purchased. The amount needed will again depend on the final design.

The chosen alternate for the Elmo-Rollins project will bypass Dayton. This will reduce the exposure and accessibility of adjacent businesses and possibly reduce their volume of business.

Several archaeological sites will be affected by the chosen alternate.

A new bridge will be built across Dayton Creek which may cause some temporary water pollution during construction. No significant impacts on air quality are expected. Noise levels will not exceed the allowable levels.

No significant impact on fish, wildlife, or waterfowl is expected.

The construction process will disrupt the area and necessitate detours, traffic delays, etc.

The projects will result in the expenditure of several million dollars and construction will consume about 670,000 gallons of oil based products.

IV. ALTERNATES

Seven alternate alignments were considered for the Elmo-Rollins project. These vary in length from 5.37 miles to 6.37 miles. Estimated costs range from $2,300,000 to $2,900,000. Between the beginning of the project and Dayton, all of the alternates, except No. 7 which follows the present highway, are located to the north and east of the existing highway with Alternates 5 and 6 being the farthest to the west. All except 5 and 6 pass through the small community of Dayton. From a point just east of Dayton to the end of the project, all of the alternates are on the same alignment and essentially follow the existing highway.

The alternate selected is a modification of Alternate No. 6. The selected alternate will still bypass Dayton but will be much closer to town than the alignment shown for Alternate No. 6. This route was selected primarily because of the improved traveling and safety consideration achieved by bypassing Dayton. All seven alternates considered together with the chosen alternate are shown in the exhibits.

Three alternate alignments were considered for the Flathead County Line-South project. They vary in length from 7.56 miles to 7.73 miles and costs range from $3,100,000 to $4,100,000. One alternate essentially follows the present highway with the other 2 located generally to the west and north. Near the end of the project one alternate shifts to the east of the present highway.

The alternate that generally follows the present highway was selected for this portion of the project because it provided the needed improvement with the least disturbance to the surrounding area. All alternates together with the chosen alternate are shown in the exhibits.

The "no-build" alternate was also considered for both projects. However, this alternate would not provide a safe and efficient transportation facility for the traveling public. The existing roadway is narrow with numerous sharp, dangerous curves with many hazardous access points. For these reasons the "no-build alternate" was not selected.

V. FEDERAL, STATE, AND LOCAL AGENCIES AND OTHER ORGANIZATIONS FROM WHICH COMMENTS WERE REQUESTED.

*Indicates agencies from which comments were received

Ernest E. Sligh, Director
Environmental Impact Division
Office of Environmental Programs
Federal Energy Administration
New Post Office Building
12th and Pennsylvania Ave. N. W.
Washington, D. C. 20461 (5 copies)

Friends of the Earth
P. O. Box 882
Billings, Montana 59103

U. S. Federal Power Commission
555 Battery Street
San Francisco, California 94100

*Indian Tribal Council
Flathead Agency
Dixon, Montana 59831

Marcus V. Nichols
First National Bank of Geraldine
Geraldine, Montana 59446

Northwestern Telephone Systems, Inc.
111 - 1st Avenue E.
Kalispell, Montana 59901

Mr. John Oberlitner
Montana Wildlife Federation
Rte. 1 - Box 45
Polson, Montana 59860

Flathead National Forest
290 North Main
Kalispell, Montana 59901

Mrs. Frank L. Askin
P. O. Box 212
Dayton, Montana 59914

Montana League of Conservation Voters
1823 Highland
Helena, Montana 59601

Federal Housing Administration
Director - Housing & Urban Development
616 Helena Avenue
Helena, Montana 59601

Hungry Horse News
Columbia Falls, Montana 59912

The Wilderness Society
4260 East Evans Avenue
Denver, Colorado 80222

John D. French, Attorney
2310 Main
Ronan, Montana 59864

Lake County Planner
P. O. Box 766
Ronan, Montana 59864

The Montana Power Company
40 E. Park
Butte, Montana 59701

Tribal Planner
P. O. Box 766
Ronan, Montana 59864

Polson Chamber of Commerce
Chairman
City Hall
Polson, Montana 59860

Flathead Lakers
Box 656
Polson, Montana 59860

Val Myers
643 E. Oregon
Kalispell, Montana 59901

Montana Automobile Association
P. O. Box 1703
Helena, Montana 59601

Board of County Commissioners
Lake County
Polson, Montana 59860

Wm. C. Walterskirchen
Professional Building
221 First Avenue E.
Kalispell, Montana 59901

*Director
Office of Environment & Design
Region 8, Federal Highway Administration
Denver, Colorado 80225

*Department of Fish and Game
Assistant Administrator
Environment & Information Division
1420 E. 6th Avenue
Helena, Montana 59601 (2 copies)

Dept. of Housing & Urban Development
Attn: Environmental Clearance Officer
Federal Office Building
19th & Stout Streets
Denver, Colorado 80202

Dept. of Health & Environmental Sciences
Environmental Sciences Division
Administrator
Cogswell Building
Helena, Montana 59601

*Environmental Protection Agency
Deputy Regional Administrator
Region VIII
Suite 900, 1860 Lincoln Street
Denver, Colorado 80203 (5 copies)

*Department of the Army
Seattle District Corps of Engineers
4735 East Marginal Way
Seattle, Washington 98104

*Dept. of Health, Education & Welfare
9017 Federal Office Building
19th & Stout Streets
Denver, Colorado 80202

Environmental Quality Council
Director
P. O. Box 215 Capitol Post Office
Helena, Montana 59601 (2 copies)

Bryan Melton
P. O. Box 312
Dayton, Montana 59914

*Asst. Secretary for Environment,
Safety and Consumer Affairs
Federal Highway Administration
Washington, D. C. 20240

State Clearinghouse
Office of Budget & Program Planning
Capitol Post Office
Helena, Montana 59601

*Mr. Ron Holliday
State Historic Preservation Officer
Department of Fish and Game
1420 E. 6th Avenue
Helena, Montana 59601

U. S. Coast Guard
Commander
Thirteenth Coast Guard District
618 Second Avenue
Seattle, Washington 98122

U. S. Dept. of Agriculture
State Conservationist
Soil Conservation Service
P. O. Box 970
Bozeman, Montana 59715

U. S. Dept. of Transportation
Federal Aviation Administration
FAA Building, Room 2
Helena Airport
Helena, Montana 59601

Dept. of Intergovernmental Relations
Director
Capital P. O.
Helena, Montana 59601

Economic Development Administration
Chicago Title Building
909 - 17th Street - Suite 505
Denver, Colorado 80202

Montana Stockgrowers Association
Secretary
P. O. Box 1679 - First Nat'l. Bank Bldg
Helena, Montana 59601

Montana Wildlife Federation
Chairwoman, Highway Committee
1015 Peosta
Helena, Montana 59601

County Extension Agent
Lake County
Chairman
P. O. Box O
Ronan, Montana 59479

Fred Martin - Director
Regional Planning Assoc. of Western
Montana - 207 East Main Street
Missoula, Montana 59801

Defense Civil Preparedness Agency
Federal Regional Center
Bothell, Washington 98011

Board of County Commissioners
Flathead County Courthouse
Kalispell, Montana 59901

Mr. C. E. McQueary, President
Kalispell Chamber of Commerce
Box 978
Kalispell, Montana 59901

West Shore Chamber of Commerce
c/o Jack Fisher
Lakeside, Montana 59922

Dick Uhde
705 Third Ave. W.
Kalispell, Montana 59901

Daily Inter Lake
Kalispell, Montana 59901

Don Whiting
Dayton, Montana 59914

Gale Warren
Polson, Montana 59860

Harry Smith
Dayton, Montana 59914

*Keith Denton
Lakeside, Montana 59922

Sierra Club
Bitterroot Mission Group
P. O. Box 315
Missoula, Montana 59801

*U.S. Department of Interior
Assistant Secretary - Program Policy
Attn: Director, Environmental Proj.
Review (14 copies)
Washington, D. C. 20240

Advisory Council on Historic
Preservation
1522 K. Street NW
Washington, D. C. 20005

Department of Anthropology
University of Montana
Missoula, Montana 59801

Mayor
City of Kalispell
Kalispell, Montana 59901

Flathead Trading Post
c/o Mannie Moore
P. O. Box 395
Rollins, Montana 59931

Mayor
City of Polson
Polson, Montana 59860

Mr. Gus Johnson
Box 71
Great Falls, Montana 59403

Flathead Courier
Polson, Montana 59860

Fred Uhde
Rollins, Montana 59931

Hal Shilling
Elmo, Montana 59915

J. W. Johnson
Elmo, Montana 59915

Mr. David Williams
Lakeside, Montana 59922

School District No. 22
Chairman
Elmo, Montana 59915

School District No. 33
Chairman
Proctor, Montana 59929

Mr. Gottlieb Beirle
2343 So. 9th - Apt. #1
Missoula, Montana 59801

Cliff N. Lund
P. O. Box 307
Dayton, Montana 59914

O. E. Kimball
Rollins, Montana 59931

O. P. Gregg
Dayton, Montana 59914

U. S. Postmaster
Elmo, Montana 59915

U. S. Postmaster
Rollins, Montana 59931

U. S. Postmaster
Polson, Montana 59860

U. S. Postmaster
Dayton, Montana 59914

Mr. Don Hacker
Lakeside, Montana 59922

Mr. S. W. Grinde
Polson, Montana 59860

VI. DATE DRAFT STATEMENT MADE AVAILABLE TO CEQ:

June 19, 1975

VII. SUBSEQUENT FEDERAL ACTIONS DUE TO THIS ACTION

1. A Corps of Engineer's Section 404 Permit may be required.

FINAL ENVIRONMENTAL STATEMENT

I. DESCRIPTION OF THE PROPOSED PROJECTS AND THEIR SURROUNDINGS

A. Location - The two subject projects are located in the northwestern portion of Lake County in northwestern Montana. They will involve the reconstruction of approximately 13.0 miles of U. S. Highway 93 on the west side of Flathead Lake between Polson and Kalispell. The attached maps (see exhibit section) show the location of the projects with respect to the entire State, Flathead Lake, Polson, Kalispell, and other small communities in the area.

The projects are within the north U. S. Highway 93 regional corridor which stretches from Missoula to the Canadian Line and passes through the counties of Missoula, Lake, Flathead and Lincoln. The south corridor covers the portion of U. S. 93 from Missoula to the Idaho Line. The city of Missoula is located 84 miles to the south of the projects and Kalispell about 30 miles to the north.

The Elmo-Rollins project, F191 (15), which is the southernmost project of the two, starts about 2.5 miles northeast of the small community of Elmo at the end of a section of highway that was built in 1962. This point of beginning is also about 2 miles northeast of the U. S. 93 - State Highway 28 junction and near the section line between Sections 16 and 17, T 24 N, R 21 W. From there, the project proceeds generally in a northeasterly direction for approximately 5.5 miles and ends about 2.3 miles northeast of Dayton. Seven alternate alignments were considered through this area and they are described in detail in the alternates section of this statement.

The Flathead County Line-South project, F191 (30), begins at the end of the Elmo-Rollins project and proceeds northerly for about 7.5 miles to a point about 1 mile south of the Flathead-Lake County line near the exit road from West Shore State Park. Three different alternate alignments were considered on this project and they are also discussed in the alternates section of this statement.

B. Purpose - U. S. Highway 93 is a major north-south route across western Montana. It begins at the Idaho border and extends northerly to the Canadian border, passing through Missoula and Kalispell, both of which are major cities in Montana. Since it is a major route, it carries a considerable amount of traffic (refer to item I-D), especially between Missoula and Kalispell.

U. S. 93 south of the Elmo-Rollins project and north of the Flathead County Line-South project has been rebuilt within the last fifteen (15) years and is a good highway. However, the existing highway within the project limits is very old and has a pavement width ranging from 22 feet to 24 feet. Much of the alignment is very poor and has numerous sharp and dangerous curves. Data from our 1973 sufficiency rating for this section of primary highway is as follows:

1) Foundation - maximum of 10 - rated at 0
2) Surface - maximum of 30 - rated at 8
3) Drainage - maximum of 10 - rated at 4
4) Safety - maximum of 20 - rated at 1
5) Capacity - maximum of 30 - rated at 21

The above ratings are very low for this type of major, primary highway and indicate that an improved highway is needed.

Therefore, the basic purpose of these two projects is to provide a new, improved, wider, and safer highway to serve the traveling public.

C. History - The existing highway from north of Elmo to the Flathead - Lake County line was built in 1932 and 1933 by the Montana Highway Department. Some improvement work has been done from time to time since it was originally built.

The highway has now been in continuous service for over 40 years and is in dire need of reconstruction. The possibility of rebuilding the Elmo-Rollins project was considered as far back as 1955 when the original survey for the project was made. Subsequent to that, design was started and by about 1964, the design was essentially complete and a considerable portion of the right-of-way had been acquired. However, because of higher priorities and the limited amount of funds, it became apparent that the project could not be let to contract for many years and work was therefore stopped. In 1968, the project was again brought back to life but by then design standards and methods and approval procedures had changed and become more complex. So design work started again with the intention of maximum utilization of the previous survey, design, and right-of-way that had already been purchased. By 1971, the project was once again back in right-of-way status and right-of-way appraisals were started. It soon became apparent that it was going to be very difficult to purchase the necessary right-of-way. There were numerous landowners in the vicinity of the project objecting to the alignment and wanting it shifted further west. Also, numerous subdivisions were platted which went right across the proposed centerline. Therefore, since it appeared that the problems were becoming almost insurmountable, the Montana Highway Commission on March 27, 1972, agreed to the undertaking of a complete re-evaluation of the location and design of the project. Since then, several

alternate alignments were selected for further review and the necessary location studies were made.

Approval to proceed with the preliminary engineering phase of the Flathead County Line-South Project was received in January, 1969. Since that time, various alternate alignments have been selected and studied.

Since the two projects were at similar stages of development and involved the same type of work, it was decided that the location studies, environmental statement, and other necessary work would be done together.

D. Traffic - The present average daily traffic on the two projects amounts to 1360 vehicles per day. Of this, approximately 13.3% is trucks. If pickups are considered to be trucks, then the total percentage of trucks would be 35.1%.

The design year traffic, which is the traffic expected 20 years after the project is let to contract, is expected to reach 3100 vehicles per day. The projects are being designed to adequately carry the traffic that is expected in the design year.

E. Scope of Work - The work to be performed on the two projects will consist of complete reconstruction of the existing highway to a new, up-to-date standard. A 44-foot wide paved highway with two 12-foot driving lanes and 10-foot shoulders will be provided.

The alignment chosen is shown on the exhibits. This new alignment will be much better than the existing alignment as it will not have the sharp, dangerous curves that now exist.

A new bridge will be built across Dayton Creek. The present highway through Dayton, including the bridge over Dayton Creek, will be left in place. Intersections will be provided both north and south of Dayton to provide access to the existing highway through town.

All conflicting utilities will be relocated before construction of the project begins.

Other work on the project will consist of providing adequate drainage facilities, topsoiling and seeding all disturbed areas, and signing and striping the new highway.

New right-of-way will have to be acquired throughout the length of the project. Some type of limited access is also being considered, although no final determination has yet been made. Initiation of this action would reduce the number of new approaches and help control their location, thereby reducing the adverse safety and capacity effects of too many approaches.

F. Existing Environment -

1. Land Use -

a. The Region -

Development Trends - Todays development patterns of the Flathead and Bitterroot Valleys to a significant degree have evolved from a number of small settlements which contained shelter for workers associated with the early lumber industry. Many of these small settlements functioned as transfer points for the logs to be shipped to sawmill towns such as Missoula, Somers and Kalispell. As transportation facilities improved, lumbering operations became concentrated in sawmill towns leaving a number of the smaller communities to look to agriculture as an economic base. The agricultural oriented communities remained low in population while the lumber manufacturing communities of Kalispell and Missoula continued to grow to become regional service centers. Contributing to the region's

past and present growth, particularly with respect to the emerging recreation industry, has been the land ownerships and use patterns that have emerged preserving the area's unique resources.

Land Ownership and Use - Regional patterns of ownership and use indicate that by far the major portion of land use is devoted to activities of an extensive low density nature. The Montana Department of Health and Environmental Sciences regulations require a 20,000 square foot or greater lot size in areas lacking water and sewer services and this is considered to be low density development.

In review of Table I it can be seen that urban and built-up land represents a very small portion, less than two percent of the U. S. 93 corridor area. For the most part in Flathead and Missoula counties these lands are concentrated in the population centers of Kalispell and Missoula. Lake County urban and built-up lands are primarily distributed in small settlements ranging in size from 50 to 5500 persons with Polson being the largest Lake County Community.

Of significance is the amount of land included under Federal (U.S. Forest and National Park Service) and private forest ownerships. Over half of Lake County and over 90.0 percent of the Flathead and Missoula Counties are composed of forest lands which contribute highly to the recreational value of the U. S. 93 corridor area.

TABLE I

LAND OWNERSHIP AND USE - 1967

LAKE, FLATHEAD AND MISSOULA COUNTIES

	Lake	%	Flathead	%	Missoula	%
Total Land Area 1/	960,000	100.00	3,289,600	100.00	1,672,320	100.00
Federal	171,125	17.8	2,411,649	73.3	714,713	42.7
Urban and Built Up	19,115	2.0	17,347	0.5	18,000	1.1
Small Water Area 2/	5,000	0.5	6,524	0.2	4,989	0.3
Agriculture 3/	764,762	79.7	854,078	26.0	934,618	55.9
Cropland	115,471	12.0	115,679	3.5	43,646	2.6
Pasture	80,891	8.4	22,354	0.7	14,000	0.8
Range	180,472	18.8	49,820	1.5	74,079	4.4
Forest	375,963	39.2	657,119	20.0	790,303	47.3
Other	12,065	1.3	9,106	0.3	12,590	0.8

1/ Does not include reservoirs over 40 acres in size.

2/ Water areas from 2 to 40 acres in size.

3/ Includes private, state, and Indian owned lands, including tribal lands.

Source: Montana Data Book, 1970.

Recreation Resources - Outdoor recreational potential is largely in direct proportion to the natural qualities that exist within an area. The complex relationships between landforms, lakes, streams, flora, fauna, climate and accessibility that are found within the U. S. 93 corridor area, coupled with the multitude of acres devoted to National Forests and the primary attractions of Glacier National Park, Flathead Lake, Jewel Basin, and the Bob Marshall Wilderness, have contributed significantly to the recreational potential of the Lake, Flathead, and Missoula County areas. Glacier Park alone attracts over one million visitors annually, many of whom travel through the

project area. As a result of the growth of the recreational industry within the U. S. 93 corridor area, several changes relative to land use have been occurring. Private development has been taking place in the form of vacation homes, camping areas, motels, marina, and other service establishments. Public recreational development such as parks, campgrounds, picnic areas, hiking, riding and sightseeing trails, and fishing access sites can be found throughout the region. With increases in the demand for recreational activities and the growth of private and public development, greater pressures have been placed on highway facilities, particularly through the project area.

b. Project Area

(i) Land Ownership (Refer to Exhibits)

Flathead National Forest

The Flathead National Forest is located to the north and west of the project area. Although the National Forest Boundary is near the project, there are no Forest Service Lands included within the U. S. 93 Project Area. Contact with the U. S. Forest Service, indicates that the proposed highway project would not interfere with any Flathead National Forest Plans.

Flathead Indian Reservation

The Indian Reservation Boundaries include the entire southern half of the U. S. 93 project area. All of F191 (15), Elmo-Rollins, and the southern portion of F191 (30), Flathead County Line-South, projects are encompassed by the reservation boundar-

ies. Approximately 85 percent of the total reservation land is owned by non-Indians. Within the project area, the amount of Indian owned land is very small, probably amounting to less than 10%. Indian owned land includes that owned by individual Indians and that held in tribal trust. These lands are shown in the Exhibits Sections. The selected alignment was a modification of alternate No. 6. The modification was made to avoid crossing Tribal Trust Land. Fish and Game holdings within the project area consist of the 39.5 acre Elmo Recreation Area, the 3.4 acre Juniper Beach Fishing Access Site and the 140 acre West Shore State Park. Contacts with the Montana Department of Fish and Game indicate that no further sites are being considered for acquisition and there are not plans for expansion of existing facilities.

(ii) Existing Land Use

Settlement patterns in general consist of low density development oriented primarily to the existing alignment of U. S. 93 and the shore of Flathead Lake. The Elmo-Rollins portion of the project area mainly encompasses three mixed permanent-seasonal residential areas, the community of Dayton and an agricultural area located on the Dayton and Proctor Creek drainage. Due to topographic limitations, the present alignment of U. S. 93, and demands for Flathead Lake frontage, a concentrating effect on residential development has resulted. Within the Flathead County Line-South portion of the project area, due to severe topographic limitations and dense forest lands, construction of permanent and summer residences has been more dispersed. Favorable climatic conditions have allowed the growing of

project area. As a result of the growth of the recreational industry within the U. S. 93 corridor area, several changes relative to land use have been occurring. Private development has been taking place in the form of vacation homes, camping areas, motels, marina, and other service establishments. Public recreational development such as parks, campgrounds, picnic areas, hiking, riding and sightseeing trails, and fishing access sites can be found throughout the region. With increases in the demand for recreational activities and the growth of private and public development, greater pressures have been placed on highway facilities, particularly through the project area.

b. Project Area

(i) Land Ownership (Refer to Exhibits)

Flathead National Forest

The Flathead National Forest is located to the north and west of the project area. Although the National Forest Boundary is near the project, there are no Forest Service Lands included within the U. S. 93 Project Area. Contact with the U. S. Forest Service, indicates that the proposed highway project would not interfere with any Flathead National Forest Plans.

Flathead Indian Reservation

The Indian Reservation Boundaries include the entire southern half of the U. S. 93 project area. All of F191 (15), Elmo-Rollins, and the southern portion of F191 (30), Flathead County Line-South, projects are encompassed by the reservation boundar-

ies. Approximately 85 percent of the total reservation land is owned by non-Indians. Within the project area, the amount of Indian owned land is very small, probably amounting to less than 10%. Indian owned land includes that owned by individual Indians and that held in tribal trust. These lands are shown in the Exhibits Sections. The selected alignment was a modification of alternate No. 6. The modification was made to avoid crossing Tribal Trust Land. Fish and Game holdings within the project area consist of the 39.5 acre Elmo Recreation Area, the 3.4 acre Juniper Beach Fishing Access Site and the 140 acre West Shore State Park. Contacts with the Montana Department of Fish and Game indicate that no further sites are being considered for acquisition and there are not plans for expansion of existing facilities.

(ii) Existing Land Use

Settlement patterns in general consist of low density development oriented primarily to the existing alignment of U. S. 93 and the shore of Flathead Lake. The Elmo-Rollins portion of the project area mainly encompasses three mixed permanent-seasonal residential areas, the community of Dayton and an agricultural area located on the Dayton and Proctor Creek drainage. Due to topographic limitations, the present alignment of U. S. 93, and demands for Flathead Lake frontage, a concentrating effect on residential development has resulted. Within the Flathead County Line-South portion of the project area, due to severe topographic limitations and dense forest lands, construction of permanent and summer residences has been more dispersed. Favorable climatic conditions have allowed the growing of

a number of small scattered orchards. The following narrative discusses in more detail existing project area land use activity.

Residential

For the most part permanent and seasonal single family residential structures are intermixed throughout the project area. The same intermixing condition is found to be true relative to new construction. Of permanent residential structures, non-farm residences are generally oriented to the lake shore reflecting demands for land of high scenic and recreational value. Farm residential structures on the other hand are more dispersed in nature and located in most cases west of the U. S. 93 alignment. Three primary areas of concentrated, non-farm residential development are found within the Elmo-Rollins project area occurring between project beginning point and the community of Dayton. The present density of these areas is approximately one dwelling unit per 20,000 square feet which conforms to Montana Department of Health requirements for private water wells and septic tank systems. However due to topographic and high water table conditions within these concentrated development areas, any further lot reductions could result in substandard lot sizes and increase potential health hazards.

Residential development within the community of Dayton is generally located back a distance of at least 100 feet from the existing U. S. 93 roadway alignment. Residential

densities for the most part within Dayton are low with the exception of the southeast portion of the community. In this area dwelling unit ratios have been reduced below the Montana Department of Health's 20,000 square foot requirement. The Comprehensive Area-Wide Water and Sewer Plan, 1970, for the State of Montana proposes a central water and sewer system for Dayton. Remaining residential development within the F191 (15) project area contains primarily a more scattered single family residential development again, concentrated along the Flathead Lake Shore. Of the Flathead Lake Shore development, greatest residential densities are found in the Rollins area. These single family residential structures meet Montana State Board of Health requirements and are located a considerable distance from the existing U. S. 93 alignment.

Commercial

Retail facilities within the project area consist mainly of combination store-gas station operations. Two of these facilities are located at Dayton and one at Rollins. In addition a locker plant, tourist museum and another store-gas station facility are located just south of Rollins. In the northern portion of the project area, located off the U. S. 93 alignment, is a restaurant-inn facility. These retail facilities are all oriented to the existing U. S. 93 alignment.

Tourist facilities such as overnight cabins and motel accommodations are mainly confined within the F191 (30) project area. One small cabin facility is located immediately adjacent to the existing U. S. 93 alignment at Rollins near Table Bay. In this same vicinity are located motel accommodations on the Lake Shore. Just north of this area is a fishing camp and trailer court facility which is situated immediately adjacent to the existing U. S. 93 right-of-way on Flathead Lake.

Industrial

Industrial land use activity within the project area is limited to agribusiness. Two poultry farms appear to be the only facilities of an industrial nature within the project area and are located near Rollins.

Recreation

Public recreational facilities are comprised mainly of those provided by the Montana Fish and Game Department. The Elmo recreation area is located approximately 2000 feet southwest of the beginning of project F191 (15) and provides camping, picnicking, fishing, swimming and boating opportunities. Approximately 1¼ miles northeast of the Elmo Recreation Area is the Juniper Beach Fishing Access. This recreational facility is undeveloped and provides mainly fishing and access to Flathead Lake. West Shore State Park, also a Montana Department of Fish and Game facility, is located at the northern terminus of F191 (30). This facility provides excellent facilities for camping, swimming, boating and access to Flathead Lake. This state park had a total of 9,146 vehicle entries during the 1976 camping season which runs

from May 15 to September 15. A private camping facility with swimming pool accommodations is located just south of Rollins.

Federal Aid Secondary 352 at Dayton provides access to the Lake Mary Ronan Recreational Area located just outside the project area. Camping, fishing and swimming facilities are provided at the Lake Mary Ronan site. A total of 4,004 vehicle entries were recorded during the 1976 camping season. This site gets very little use during the winter months.

Semi-public church camp facilities are provided by the United Methodist Church at Rollins and by the Presbyterian Church just north of the terminous of F191 (30).

Community Facilities

School facilities of the project area include two small, older elementary schools. The elementary school located at Dayton is located on a small site adjacent to the existing U. S. 93 alignment. On a larger site is the Rollins area elementary school site, located approximately 1000 ft. from the existing U. S. 93 alignment.

Church facilities other than the church camps previously mentioned in the recreation section are located at Dayton and Elmo.

The Rollins area Volunteer Fire Department equipment is housed just south of the elementary school.

Just west of Dayton, outside of the limits of the project alternates, is located the only known cemetery in the project area.

Cultural

According to the University of Montana Department of Anthropology, there are sixteen known historical and archaeological sites located within or adjacent to the F191 (15) and F191 (30) project areas. Three

of these sites are located along Dayton Creek. None of the 16 sites are included in the National Register of Historic Places or the State Historical Preservation Plan, nor are any of these sites considered eligible for nomination to the National Register.

Agriculture

The largest portion of the F191 (15) Project Area consists of open rangeland with scattered forests at the upper elevations. Dayton Creek and Proctor Creek west of Dayton form a small sub-irrigated valley containing croplands and haylands.

Surrounding Rollins within the F191 (30) project area and including a small area approximately one mile south of the West Shore State Park, are farmlands subirrigated by perennial streams and mountain snow melt. Due to the sloping topography of the locality a major portion of these farmlands are used for pasture. Also found within the F191 (30) project area, due to small pockets of favorable climatic conditions, are apple and cherry orchards.

(iii) Land Use Planning

At the present time there are no known existing general plans or proposed land use plans included within or encompassing the project area. Three planning organizations do have jurisdictions which would include the project area of the two proposed highway projects. These planning organizations are the Flathead Indian Reservation, The Regional Planning Association of Western Montana and the Lake County Planning Board.

The Confederated Salish and Kootenai Tribes of the Flathead Reservation Planning Process is currently involved with an inventory

and mapping phase with respect to reservation resources. Tribal inputs to this statement consisted of:

(1) Coordination and evaluation of reservation planning efforts with respect to the proposed F191 (15) Project.

(2) Review of 4 (F) lands and lands of cultural significance to the reservation.

The Regional Planning Association of Western Montana presently provides planning services to a nine county area in Western Montana. Counties encompassed by the Regional Planning Association include Flathead, Granite, Lake, Lincoln, Mineral, Missoula, Powell, Ravalli and Sanders Counties. Similar to the Flathead Indian Reservation, the Regional Planning Association of Western Montana has been primarily concerned with resource inventory and mapping. Other functions of the Association have been planning education, assistance to member counties in the organization of planning boards, and to assist established boards with their planning activities. The regional planning organization provided substantial assistance in furnishing both background and resource inventory data for this statement. Specific areas of assistance included:

(1) Coordination between the Montana Department of Highways and Lake County governments in respect to the proposed projects and planning - design-evaluation process.

(2) Provision of inventory data relative to geology, earthquake epicenters, soils, and land ownership patterns.

Since the newly formed Lake County Planning Board was in the preliminary organization stage, it did not provide input into the preparation of this environmental impact statement. The new County Planning Board was furnished with a copy of the Draft Environmental

Impact Statement for review and comment.

2. Terrain - The project area's terrain can be described as mountainous to the north and large rolling hills and rock outcroppings to the south. All drainages drop off toward the shore of Flathead Lake. A large drainage formed by Dayton Creek and Proctor Creek flows eastward intercepting Flathead Lake and the project near Dayton. Two other smaller drainages formed by Birch and Big Lodge Creeks are found near Rollins. Relief of the project area varies from 2900 feet above mean sea level on the west shore of Flathead Lake to 4500 feet within the Hog Heaven Mountain Range about 2 miles southwest of Rollins. The extremes in local relief have had considerable influence on project area settlement patterns.

3. Stream Crossings - Dayton and Proctor Creeks form the basic perennial stream drainage pattern for the southern half of the project area. These creeks drain into Flathead Lake near Dayton. There are also 5 intermittent streams providing additional runoff during the snowmelt and wet seasons of the year.

 Birch, Big Lodge, and Forrey Creeks form the perennial stream system on the northern half of the project. In addition, there are also 4 intermittent streams in this area.

4. Geology - The general geology of the subject projects consist primarily of till, argillite bedrock and gravels derived from Dayton Creek. Similar geologic conditions exist on each of the alignments.

 The first mile or so of the project consists primarily of glacial till containing silts with lesser amounts of gravel. Steeply dipping bedrock is encountered in the next 2 miles. Bedrock consists of dark maroon quartzitic argillite of Pre-Cambrian age. Bedrock is overlain in places by till and in the valley of Dayton Creek drainage, gravel overlays the bedrock. North of the Dayton Creek Drainage, till overlies the bedrock and a few rock exposures are noted ahead on

station until argillite rock exposures outcrop about 2.5 miles north of Dayton. Rock and in places, sand - silty till is encountered throughout the remainder of the project.

5. Climate - Surrounded by sheltering mountains, the project area and the Flathead Valley in general has a very mild climate considering its elevation and latitude. The natural barrier of the Rocky Mountains wards off and deflects to the southeast, the great majority of cold waves that sweep down from Canada. In the valley, there are no blizzards, hot winds, tornadoes, or hurricanes. Periods of severe cold are very infrequent and do not last very long. There have been winters when the temperature has not reached zero degrees. There is hardly any wind as the average wind velocity of 4.6 miles per hour is very low. Summer weather is also mild with the daytime temperature rarely reaching 90° and cool nights.

 The mean annual temperature for the area is 41.4 degrees and the average annual rainfall amounts to about 14 inches.

6. Population - Population of the three counties comprising the north U. S. Highway 93 corridor area has grown considerably during the last few decades reaching 112,168 inhabitants by 1970. Since 1950, total population numbers for Flathead, Lake and Missoula counties have increased by almost forty percent. (Refer to Table II) Missoula County had the largest growth in population indicating an increase of almost 65.0 percent within the twenty-year period. Representing the lowest growth rate of the three county area during the two decades was Lake County with a population increase of 4.4 percent. Responsible for the low growth rate was the loss in population by Lake County between 1950 and 1960. During this period the county experienced a population loss of 721 persons as a result of 2,447 persons moving out of the county while having an excess of 1,726 births over deaths. (Refer to Chart I)

CHART I

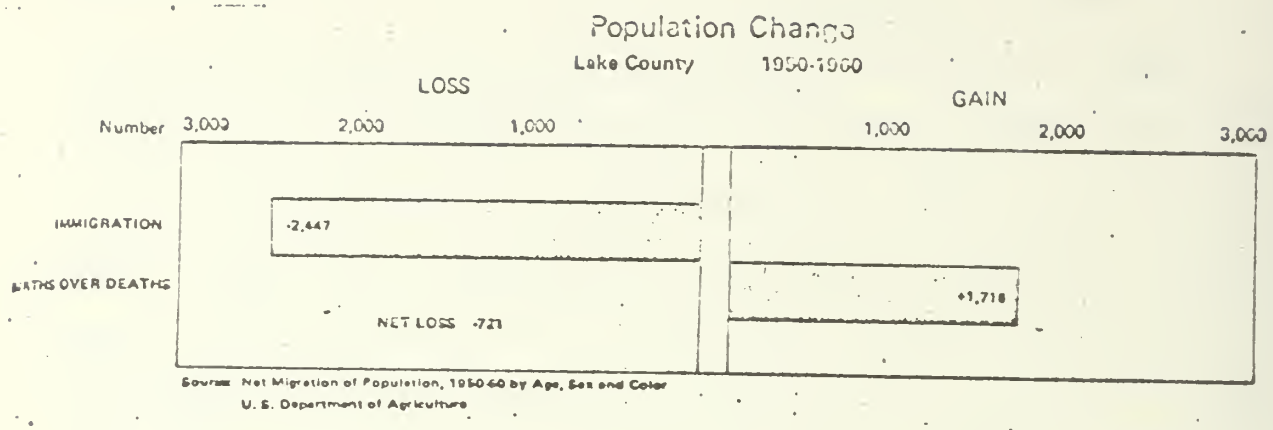


TABLE II

POPULATION NUMBERS - U.S. 93 CORRIDOR AREA

County	1950	1960	1970	Percent Increase 1950-70	Percent Increase 1960-70
Flathead	31,495	32,695	39,460	+25.3	+19.7
Lake	13,835	13,104	14,445	+ 4.4	+10.2
Missoula	35,493	44,663	58,263	+64.2	+30.5
Total Corridor Area	80,823	90,732	112,168	+38.8	+23.6

SOURCE: U.S. Census of Population 1970, 1960, 1950

Major communities within the corridor area have also shown substantial increases in population. Without including urban area populations, the City of Missoula grew from 22,385 persons in 1950 to 29,497 by 1970 representing over a 30.0 percent increase. Both the cities of Kalispell and Polson indicated over 8.0 percent increases during the same twenty year time period. (Refer to Table III) The City of Polson had its largest population gain during the 1960-70 decade amounting to 6.5 percent or 150 persons.

The West Shore Census County Division, which encompasses the project area, increased in permanent population numbers from 579 to 642 during the 1960-70 decade. (Refer to Table IV) This 10.9 percent growth rate can be attributed in a large part to increases in the Indian population and in migration of out-of-county and out-of-state residents.

Conclusions

1. The entire U. S. Highway 93 corridor area increased in population between 1960 and 1970.
2. The City of Missoula and Missoula County accounted for the largest population increase with Flathead County being second.
3. Although the City of Polson and Lake County indicated small and negative population changes from 1950 to 1960, respectively, growth rates significantly increased from 1960 to 1970.
4. It is anticipated that the U. S. 93 corridor area will continue to be one of the fastest growing regions within the State of Montana.(Refer to Table V)

TABLE III

POPULATION OF MAJOR COMMUNITIES

U.S. 93 CORRIDOR AREA

City	1950	1960	1970	Percent Increase 1950-70	Percent Increase 1960-70
Kalispell	9,737	10,151	10,526	+8.1	+3.7
Missoula	22,485	27,090	29,497	+31.2	+8.9
Polson	2,280	2,314	2,464	+8.1	+6.5

SOURCE: U.S. Census of Population 1970, 1960, 1950.

TABLE IV

POPULATION NUMBERS

U.S. 93 PROJECT AREA

Area	1960	1970	Percent Increase 1960-70
West Shore County Census Division Lake County	579	642	+10.9

SOURCE: U.S. Census of Population 1970, 1960.

TABLE V

POPULATION PROJECTIONS TO 1985

Urban Area /1	1970 Population	1985 Estimates
Missoula	52,300	86,600
Kalispell	19,900	25,300
Polson	4,100	5,400

SOURCE: Upper Midwest Council, January 1973.

/1 Includes Contiguous non-farm population.

7. Economic Characteristics

a. Family Income Distribution

Income of Lake County families has increased considerably since 1960. (Refer to Table VI) Median income rose from $4183 in 1960 to $6786 in 1970 representing a 62.2 percent gain. Decreases were indicated in the number of families within all income ranges below $6000 with the opposite being true for families in the income ranges $6000 and above. Percentage increases in the number of families with incomes over $8000 ranged from 102.9 percent to a high of 577.5 percent. The largest increase was in the income range of $10,000 to $14,999 which in 1970 had 691 families as compared to 102 families in 1960.

TABLE VI. .

FAMILY INCOME AND DISTRIBUTION

LAKE COUNTY

Family Income Distribution	1960	1970	Percent Increase 1960-70
Under 1,000	222	153	-31.1
1,000 to 1,999	401	186	-53.6
2,000 to 2,999	439	287	-34.6
3,000 to 3,999	459	344	-25.1
4,000 to 4,999	515	255	-50.5
5,000 to 5,999	381	327	-14.2
6,000 to 6,999	277	359	+29.6
7,000 to 7,999	200	245	+22.5
8,000 to 8,999	139	282	+102.9
9,000 to 9,999	48	240	+400.0
10,000 to 14,999	102	691	+577.5
15,000 to 24,999	39	251	+543.6
$ 25,000 +	8	48	+500.0
Median Income	$ 4183	$ 6786	+62.2

SOURCE: U.S. Census of Population 1970, 1960.

Table VII compares the income of the entire county to the income of the West Shore Census County Division which approximates the project area. It can be seen that the mean income of the West Shore Census County Division is considerably less than the overall county average.

Table VII

LAKE COUNTY FAMILY INCOME AND DISTRIBUTION: 1970

Family Income	County Number	County Percent	West Shore CCD 1/ Number	West Shore CCD 1/ Percent
Income				
$under 1,000	153	4.2	6	4.5
1,000 to 1,999	186	5.1	14	10.5
2,000 to 2,999	287	7.8	26	19.4
3,000 to 3,999	344	9.4	17	12.7
4,000 to 4,999	255	7.0	--	0.0
5,000 to 5,999	327	8.9	29	21.6
6,000 to 6,999	359	9.8	3	2.2
7,000 to 7,999	245	6.7	3	2.2
8,000 to 8,999	282	7.7	--	----
9,000 to 9,999	240	6.5	6	4.5
10,000 to 14,999	691	18.8	25	18.7
15,000 to 24,999	251	6.8	5	3.7
$25,000	48	1.3	--	----
TOTAL	3668	100.0	134	100.0
MEAN INCOME	$7718		$5830	

Source: U.S. Census of Population - 1970

1/ West Shore Census County Division Approximates the Highway Project Area

b. Labor Force and Employment

Between 1960 and 1970 the Lake County civilian labor force increased by 9.5 percent or slightly over 400 persons. During this same time period the total number of persons employed grew by 504, thereby reducing the unemployment rate from 9.1 percent to 6.5 percent. (Refer to Table VIII) A review of employment by industry reflects significant decreases in both agriculture, forestry, fisheries category, and wholesale trade. Agriculture, a basic industry to Lake County, declined in employment by over 200 workers paralleling state and national trends. The recent tendency towards fewer and larger wholesale distributing facilities located in the urban service centers of Montana may have accounted for the downward shift in wholesale employment. Industries indicating substantial gains in the number of workers employed were manufacturing, retail trade, services (includes insurance, real estate and finance) and government. Both manufacturing and retail trade account for employment increases ranging from 25.0 to almost 28.0 percent respectively. Lake County manufacturing principally consisted in the fabrication of furniture, lumber and wood products. Largest employment increases, as elsewhere in Montana, were found in the services and government employment categories with both reflecting over 30.0 percent gains. Increases in manufacturing, retail trade, services and government employment more than offset the jobs lost in agriculture.

TABLE VIII

LABOR FORCE AND EMPLOYMENT

LAKE COUNTY

	1960	1970	Percent Change 1960-70
Civilian Labor Force	4404	4821	+ 9.5
Employed	4003	4507	+12.6
Unemployed	401	314	-21.7
Percent	9.1	6.5	- 2.6
Agriculture, Forestry and Fisheries	1204	996	-17.3
Mining	10	22	+120.0
Construction	198	218	+10.1
Manufacturing	437	546	+24.9
Transportation, Communications and Utilities	219	238	+ 8.7
Wholesale Trade	77	51	-33.8
Retail Trade	669	854	+27.7
Insurance, Real Estate, Finance	73	129	+76.7
Services	626	846	+35.1
Government	455	607	+33.4
Other	35	----	-----

SOURCE: U.S. Census of Population 1970, 1960.

In comparison to the entire county, it appears that the West Shore Census County Division suffered considerably more unemployment. (Refer to Table IX)

Table IX

LAKE COUNTY LABOR FORCE AND EMPLOYMENT: 1970

	Lake County		West Shore CCD. 1/	
	Number	Percent	Number	Percent
Civilian Labor Force	4821	100.0	132	100.0
Employed	4507	93.5	110	83.3
Unemployed	314	6.5	22	16.7
Agriculture, Forestry and Fisheries	996	22.1	6	5.4
Mining	22	0.5	6	5.4
Construction	218	4.8	6	5.4
Manufacturing	546	12.1	5	4.6
Trans., Comm. and Util.	238	5.3	6	5.5
Wholesale Trade	51	1.1	---	-----
Retail Trade	854	19.0	10	9.1
Ins., Real Estate, Fin.	129	2.9	18	16.4
Services	846	18.8	29	26.4
Govt.	607	13.4	24	21.8

Source: U.S. Census of Population 1970

1/ West Shore Census County Division Approximates the Highway Project Area

c. Major Economic Industries

The ranking of major economic industries by worth to the local economy is very difficult to determine since produce value (Refer to Table X) in the case of manufacturing represents value added to a product, in retail trade it represents product sales, and in selected services receipts are used. Selected services is another obstacle because statistics available represent only a portion of the total service industry. In attempting to rank each industry relative to its contribution to the local economy three basic factors should be considered which are: (1) product value as previously discussed, (2) number of employees (jobs produced), and (3) payroll (earnings available to buy goods and services). Agriculture would be considered of primary importance to the local economy with manufacturing second, retail trade and services would be third and fourth respectively and government services fifth. Wholesale trade would be sixth, transportation, communications, and utilities seventh, construction eighth, and mining ninth, in economic importance to their contribution to the Lake County economy.

TABLE X

WORTH OF MAJOR ECONOMIC INDUSTRIES

BY RANKING

LAKE COUNTY

Industry	Date	Product Value	Establishments	Employees	Payroll
Agriculture /1	(1969)	$11,716,664	1012	1435	$2,431,587
Mining /2	(1968)	71,000	----	20	---------
Construction /2	(1972)	----------	16	106	108,000
Manufacturing /2	(1967)	6,300,000	29	305	3,800,000
Trans,Comm,Util. /2	(1972)	----------	10	59	97,000
Wholesale Trade /4	(1967)	3,979,000	14	42	214,000
Retail Trade /4	(1967)	19,830,000	170	487	1,758,000
Selected Services /4	(1967)	$ 1,147,000	81	64	2,538,000
Government /3	(1969)	----------	-----	927	$ 3,708,000

SOURCE: /2 County Business patterns 1972
/1 U.S. Census of Agriculture 1969
/3 Estimated using an average annual income of $4000 per year
/4 U.S. Census of Business

Conclusions

1. Lake County family income expanded from a median of $4183 to $6786 between 1960 and 1970 with greatest increases seen in the $9000+ income levels. However, the Highway Project area did not totally share in the expanded family income. In terms of 1970 family mean income, Lake County's $7718 was $1888 above the West Shore Census County Division's (The West Shore C.C.D. characteristics would approximate the Highway Project Area) family income of $5830. Almost 70 percent of the families within the West Shore Census County Division earned less than $6000 as compared to slightly over 40 percent for all Lake County.

2. Labor force characteristics indicate Lake County's work force and employment increased moderately while unemployment dropped 2.6 percent since 1960. Table IX suggests that the Project Area suffered substantially greater unemployment,16.7 percent in 1970,in relation to Lake County's total of 6.5 percent.

3. Agriculture, still the leading employer for Lake County, dropped in employment by 17.3 percent. Substantial total County gains were seen in the manufacturing, retail trade, services and government sectors. Unlike total Lake County employment figures, the agriculture, forestry and fisheries industry comprises only 5.4 percent of the West Shore C.C.D. total employment. However, following Lake County trends was an increasing emphasis in the services and public administration sectors by Project Area employees.

4. Agriculture and wood products manufacturing respectively provide the economic base and the largest share of employment opportunities for Lake County with the exception of the West Shore Census County Division. In accord with total Lake County characteristics in the Project Area's growing economic dependence on the retail, service and government segments of the local economy for employment.

8. Fish and Wildlife - The only fisheries encountered along the Elmo-Rollins Project are Dayton Creek and Flathead Lake.

According to the Montana Department of Fish and Game, no inventory of the fish population of Dayton Creek has been made. Ronan Creek, the outlet of Lake Mary Ronan and a tributary of Dayton Creek, has been sampled and found to contain rainbow trout, cutthroat trout, and kokanee salmon. It is probable that these species also inhabit Dayton Creek. In addition, it is possible that fish from Flathead Lake use Dayton Creek for spawning.

In general, Dayton Creek provides a poor fishery because of heavy dewatering from irrigation, and siltation due to intensive grazing.

Flathead Lake, the largest natural body of fresh water west of the Mississippi, is one of the most important recreational areas in western Montana. Fishing forms an important part of this recreational resource. The following list shows the species of fish present in the lake and their relative abundance (Douglas MacCarter, 1972).

Species	Abundance*
Lake Trout	C
Dolly Varden	C
Brook Trout	R
Cutthroat Trout	C
Rainbow Trout	R
Kokanee	A
Mountain Whitefish	C

Species	Abundance*
Pygmy Whitefish	R
Lake Whitefish	C
Largemouth Bass	C
Yellow Perch	C
Northern Squawfish	A
Peamouth	A
Pumpkinseed	C
Largescale Sucker	C
Longnose Sucker	C
Redside Shiner	C

*A - abundant; C - common; R - rare

White-tailed deer, mule deer, ring-necked pheasant, and Hungarian partridge are seen occasionally in the fields adjacent to Dayton Creek. The general lack of interspersed cover types and intensive grazing by livestock prohibits this from being an important deer range. The lack of extensive grain farming and heavy grazing probably inhibits production of game birds.

Residents of the area report that ducks nest along Dayton Creek.

Moose and elk are found in the mountains to the northwest of the project, but are seldom seen adjacent to the road. Blue grouse, spruce grouse, and ruffed grouse also occur in the more heavily wooded areas to the northwest.

No species classified as endangered under the Endangered Species Act of 1969 are known to be present near the proposed project.

Flathead Lake is the site of a relatively large concentration of ospreys. This species is not classified as endangered or threatened by the federal government, but has been the subject of numerous in-

vestigations because populations appear to be declining in some areas due to ingestation of toxic pesticides.

The osprey population of Flathead Lake areas has been studied by Donald MacCarter (1972) and Douglas MacCarter (1972). Review of these papers and correspondence with the authors indicates that the proposed projects do not traverse prime osprey habitat. No known nests are located so as to be affected by the construction.

The Flathead County Line South project traverses the shore of Flathead Lake, but does not cross any drainages containing fish.

The extensive mixture of pastures, orchards, and coniferous forest make the area bordering this project an important deer range, especially in the winter. Elk and moose are found in the mountains to the northwest, but are seldom seen near the road.

Mountain grouse occur along the route, but this is not pheasant, Hungarian partridge, or duck habitat.

9. Vegetation - The major vegetation types encountered along the alternates for the Elmo-Rollins project include open pastures used for grazing cattle and horses and a few hay fields along Dayton Creek. The area generally lacks dense stands of timber, although scattered stands occur in places.

Common pasture grass species include: Kentucky bluegrass, Smith melic, green needlegrass, bluebunch wheatgrass, wheatgrass, needle and thread, western wheatgrass, and cheatgrass brome.

Common forbs include: common salsify, yarrow, alfalfa, lupine, and yellow paintbrush.

Woods rose, common snowberry, western snowberry, service berry, and squaw current are common shrubs.

The major tree species are Ponderosa pine and Rocky Mountain Juniper. Douglas-fir occurs less commonly.

The vegetation along Dayton Creek is a dense tangle of deciduous trees and shrubs. Common species include black cottonwood, chokecherry, water birch, willow, and western snowberry.

The Flathead County Line South project traverses a much more heavily wooded area. Open pastures are present, but are relatively small due to remnants of forest. Cherries and apples are grown in many small orchards throughout this area.

The forested areas are composed primarily of Douglas fir, Ponderosa pine, and western larch. Rocky Mountain Juniper occurs much less frequently.

Mountain maple, water birch, mockorange, common and western snowberry, mountain spray, and service berry are found bordering orchards and pastures.

10. Transportation Facilities - U. S. Highway 93 is the major transportation facility in the area. It is a part of the Montana Primary Highway System and its primary routing number is FAP 5. U. S. 93 is intersected by State Highway 28 or FAP 36 just south of the project area at Elmo. The only other highway within the project area is Federal Aid Secondary 352 which intersects U. S. 93 at Dayton and runs northwest for approximately 5.5 miles to Lake Mary Ronan.
11. Utilities - There are power and telephone lines running along the existing highway for the entire length of the project area.

Existing water and sewer facilities are limited to individual water wells and septic tanks. Plans for central systems have been considered by the Comprehensive Area-Wide Water and Sewer Plan - 1970, for both Dayton and Rollins.

12. Noise - A thorough noise study was conducted on both the Elmo-Rollins and the Flathead County Line-South projects. The results of this study are provided in the Noise Study Report which is included in the Exhibits. The ambient noise readings ranged from 56.0 dBA to 64.5 dBA at 100 feet from the centerline of the present roadway. The 20 year projected noise level for the new highway is 68.5 dBA at 100 feet from centerline which is below the 70 dBA limit for residential and recreational land.

13. Air Quality - Air quality in the Flathead River Valley is generally good with the exception of suspended particulate. Flathead and Lake Counties have been designated an Air Quality Maintenance Area (AQMA) for suspended particulate.

The Flathead Valley is surrounded on three sides- north, east and west - by mountains rising 3,000 to 4,500 feet above the valley floor. The southern portion of the valley contains Flathead Lake. The topographical and meteorological characteristics of the valley cause frequent inversions and stagnations which may contribute to elevated air quality readings.

Analysis of current air quality data in the Flathead Valley indicated that there have been several violations of the short term, 24-hour National Ambient Air Quality Standards, but no violations of the annual standards. Emission projections do not show the potential for large increases in AQMA emissions in future years.

The major point sources in the AQMA include the aluminum reduction plant at Columbia Falls and the wood product industries located near Columbia Falls and Kalispell. The major area sources include dust from unpaved roads and open burning.

II. PROBABLE ENVIRONMENTAL IMPACT

A. Broad Impacts - The major broad impact of these projects will be the provision of a safe and efficient highway facility to replace the narrow, dangerous roadway that now exists. This type of facility is becoming more and more necessary for emergency and commercial vehicles as well as the general traveling public.

These projects will be beneficial to both the State and the region by providing a highway facility that will better serve the traveling public. Tourists from throughout the U. S. will have a safer and more efficient highway upon which to travel through the area. The cities of Polson and Kalispell will essentially be tied closer together and travel between them will be much easier and quicker. Access to religious, cultural, recreational, and employment opportunities will be much better for those persons that live in the project area. Emergency services should be faster and school busses will have a better and safer facility over which to transport students.

Due to the improved highway that will be provided, more land may be subdivided for home or cabin sites. Also, the land that is already subdivided, but has not been sold, may become more appealing to the public and easier to sell. An increase in actual development of the homesites may also occur. A considerable amount of land that has already been subdivided will be needed for right-of-way. This is discussed in more detail in the Alternates Section of this statement.

The projects will affect to some degree, 4 different major subdivisions in the area. The subdivisions affected are Grinde Tracts, Cromwell Villa, Juniper Shores, and Silver Salmon Shores. Information concerning the alternates involved with each subdivision, the number of parcels affected, etc.

is as follows:

Subdivision	Alternates Involved	Total Parcels in Subdivision	Number of Parcels Affected	Number of Parcels Developed	Parcel Size
Grinde Tracts	Alt. 1,		24		
	Alt. 1,2	52	24	28	20,000 sq.ft.
	Alt. 1,3		24		
	Alt. 1,4		24		
	Alt. 1,6		24		
	Alt. 7		24		
	Alt. 5,1		0		
	Selected Alignment		24		
Cromwell Villa	Alt. 1,		22		
	Alt. 1,2		22	3	174,200 sq. ft. to
	Alt. 1,3	60	22		1,000,000± " ft.
	Alt. 1,4		22		
	Alt. 1,6		22		
	Alt. 7		22		
	Alt. 5,1		10		
	Selected Alignment		22		
Juniper Shores	All Alternates	34	3	5	50,000 sq. ft.to 240,000 sq. ft.
Silver Salmon Shores	All Alternates	41	12	9	37,500 sq.

Secondary impacts may also result from construction of the F191 (15) and F191 (30) projects relative to increased accessibility and traffic exposure to the project area. Spurred new development in the form of homesites and visitors to the area will place increased demands on public services and facilities. Assuming that the proposed highway projects act as a catalyst to only existing undeveloped subdivision tracts approximately 185 new residential structures would be found in the project area. Utilizing a 1970 Census factor of 3.2 persons per occupied unit the project area's population could increase by 592 persons of which 336 would be permanent residents and 256 the additional seasonal population. (This ratio was determined by using the 1970 Census of Housing proportion of seasonal dwellings to total dwellings for the West Shore Census County Division of Lake County). A permanent population increase of 336

residents would account for over a fifty percent increase in the project area's permanent population. Project Area secondary impacts are described as follows:

(1) Schools

In using present ratios of Lake County school age children to total population an estimated 60 new grade school children would be attending the Dayton and Rollins elementary school facilities. An additional load of approximately 45 high school students would be generated out of the new permanent population.

(2) Police Protection

The Lake County Sheriffs Department would be required to increase law enforcement services for 185 new residential structures, 336 new permanent residents or an additional summer population of 592. Additional protective services would be required for new generated retail and service establishments.

(3) Fire Protection

The Rollins Area Volunteer Fire Department and other fire fighting organizations may be required to serve an additional 185 new residential structures as well as new generated retail and service developments.

(4) Recreation Facilities

Beaches, fishing access and boat launching areas demands would more than double with the additional local population numbers and visitors generated from increased traffic through the project area. This is brought on with respect to new local residents since a large part of the existing Flathead Lake Shore is already privately developed.

Similar secondary impacts would result to locally available emergency, medical, social, cultural and educational services in Kalispell and in addition to these services county government services in Polson.

Some displacement of existing homes and businesses is going to be necessary for the projects. The number of displacements for each alternate and the selected alignment is discussed in more detail in the Alternates Section of this statement. All relocation will be handled in accordance with the Montana Department of Highways standard right-of-way procedures which will provide relocation assistance for all displaced homes and businesses. No one would be moved until adequate replacement facilities had been secured.

The availability of decent, safe, and sanitary housing is rather limited as local realtors have very few homes listed for sale in the project area. However, there are 5 real estate agencies in Lakeside, which is located about 4 miles north of the end of the F191 (30) project, which have subdivision tracts, lakeshore properties, and acreages listed for sale in the project area. There are also real estate agencies in Big Arm, Kalispell, and Polson which have lake shore and subdivision properties listed for sale. Therefore, it is assumed that most of the relocation will have to be accomplished by building new homes, providing mobile homes, or moving the present dwellings. Mobile homes and pre-built homes are for sale in both Kalispell and Polson. There are building contractors in Polson, Kalispell, and Big Fork and house movers in Kalispell.

No natural landmarks, parks, wildlife or waterfowl refuges will be affected by these projects. Consultation with the National Register of Historic Places and the State Historical Preservation Plan indicates that

these projects will not affect any National Register or State Preservation Plan properties. Also, the State Historical Preservation Officer of Montana was contacted concerning any possible project effects upon any historical or archaeological sites which may be in the process of nomination to the National Register or the State Preservation Plan. We were informed that the project would not affect any such sites.

The selected alternates may affect three of the 16 known archaeological sites mentioned previously. However, before the project is let to contract, the Statewide Archaeological Survey will be contracted to make a complete survey of the project area. With the results of their survey it will be determined whether or not, the three known sites and any as yet unknown sites that are discovered should be preserved or salvaged. If the sites are not to be preserved the Statewide Archaeological Survey will perform any work they deem necessary. Also, if during construction, any significant archaeological sites or artifacts are encountered, the work shall be temporarily discontinued and archaeological authorities contacted to determine the significance and disposition of the find in accordance with the Standard Specifications. It has been determined that none of these three sites are eligible for nomination to the National Register.

Because the selected alignment bypasses Dayton, commercial facilities within Dayton may loose some of their exposure and accessibility. This could result in a reduction in their volume of business. Other commercial facilities along the projects should not be materially affected because the new highway will generally follow the existing roadway.

Economic activity in the project area will undoubtedly increase while the projects are under construction. However, this increase in activity will

be short-lived and last only as long as it takes to complete the projects. If the increased subdivision activities mentioned earlier should occur, economic activity in regard to land sales, building trades, and local services would also increase. This type of economic activities would be of a longer lasting nature and would not stop when the project was completed.

Since the Elmo-Rollins Project will not infringe upon Flathead Lake, the only impact on fisheries' resources will be from crossing Dayton Creek. If construction were to impede stream flow or cause heavy siltation, fish spawning and aquatic insect populations would be likely to suffer.

Adverse impacts will be largely avoided by bridging the stream with a structure (not a culvert) which would allow free flow of the creek. Since the creek is only 10-15 feet wide, except at its mouth, piers in the channel will be avoided.
This will have the additional benefit of minimizing siltation.

Other important measures which will be taken include:

(1) The creek will be crossed so as to avoid disturbing the channel as much as possible.

(2) As much stream bank vegetation as possible will be preserved.

(3) Construction equipment will not be operated in the channel.

(4) Erosion control measures will be used where necessary, and revegetation of bared areas will be provided.

(5) The possibility of limiting the time for the placing of the bridge abutments and other work likely to cause siltation to the period of August and September will be considered. This is the least critical

period for fish spawning. In addition, efforts will be made to have all work causing sedimentation performed at one time so sedimentation will not occur repeatedly.

It is anticipated that a Section 404 permit will not be required for this project. However, a Section 404 permit will be obtained, if necessary.

In the area where the selected alignment for the Elmo-Rollins project departs considerably from the present highway, it will transect several pastures and cultivated fields. The increased presence of man in this area plus the likelihood of development along the new road may tend to reduce the number of deer, pheasants, Hungarian partridge, and ducks inhabiting the area.

The Flathead County Line South project will have no impact on the fisheries of Flathead Lake. Also, because the proposed alignment does not deviate significantly from the present road there is not likely to be a significant impact on wildlife populations.

In general, construction activities of both projects along any of the alternates will tend to have a non-permanent, short-term adverse impact on wildlife populations.

The last impact of the project on wildlife to be examined is the possibility of increase collisions between vehicles and big game. According to the Department of Fish and Game, deer crossings in the vicinity of the north reservation line and in the vicinity of the West Shore State Park are heavily used each year by both resident and migrant deer. The new facility would provide more gradual curves and would increase sight distance. This would probably result in an increase in the traveling speed of vehicles which may result in more collisions between vehicles and deer.

The proposed alignment around Dayton will create a long and somewhat unsightly scar as it traverses open hillside from near the beginning of the project to the Dayton Creek area. Much of this scar will be visible from parts of the lake and will be a definite detriment to the aesthetics of the area. It will be topsoiled and seeded, but this will not remove it completely.

Since construction of these projects is not expected to significantly alter traffic volumes or traffic patterns, no discussion of traffic fuel consumption is necessary. It is estimated that the following amount of oil based products will be needed for construction of the project.

Diesel No. 2	590,000 gallons
Gasoline	80,000 gallons
Asphalt	4,000 tons

B. Impacts on the Narrow Band Adjacent to the Project

There will be numerous impacts on the narrow band adjacent to the projects. These will occur before, during and after construction.

Before construction can be started it will be necessary to purchase adequate right-of-way for the projects. The right-of-way take needed for each alternate considered and for the selected alignment is discussed in the Alternates Section of this statement. The land needed for right-of-way will involve the taking of both agricultural land and forested land. It will also be necessary to have all existing conflicting utilities relocated before construction can be started.

A new bridge will have to be built over Dayton Creek. The existing bridge will be used to maintain traffic. During the construction of the new bridge the contractor will be required to adhere to all applicable State and National laws pertaining to prevention of water pollution. He

will also have to follow all Montana Department of Highways Standard Specifications pertaining to water pollution. These laws and specifications will apply not only to bridge work, but also to any other work in the vicinity of the creek. These things will keep water pollution to a minimum, however, a small amount will undoubtedly occur.

All areas exposed during construction, including cut and fill slopes, borrow areas, etc., will be topsoiled, fertilized and seeded, where practical, in accordance with Montana Department of Highways standard procedures. This work will be done as soon as possible after rough grading is completed. As the vegetation becomes re-established, it will reduce the amount of erosion considerably. The project design will incorporate best available erosion control features.

The overall impacts to both surface and subsurface water are anticipated to be very minor. All work will be in conformance with the Water Quality Standards and the Montana Stream Preservation Law.

Air pollution will not be a major problem on this project although some will probably occur during the construction process. The contractor will have to follow all applicable laws and the Department of Highways Standard Specifications regarding this type of pollution.

Future air pollution levels are not expected to be significantly affected by this project. Using the simplified Analysis Technique for Estimating Carbon Monoxide Concentrations Near Highway Facilities it is estimated that future one and eight-hour carbon monoxide concentrations will be less than 1 PPM at the roadway shoulder. This low concentration is the result of low traffic volumes and high speeds.

Both projects are included in the Kalispell Air Quality Maintenance Area which was designated as such for suspended particulate only. There is likely to be some dust as a result of these projects during the construction phase. However, the Standard Specifications call for the ample use of watering

to reduce dust during construction. Revegetation of all disturbed areas will reduce the amount of suspended particulate entering the air after construction is completed. There will be no increase in travel on unpaved roads, a major source of dust, as a result of this project.

The Montana Department of Health and Environmental Sciences is the designated State Air Pollution Control Agency by the EPA. The Montana Department of Health and Environmental Sciences has been consulted with respect to possible air pollution resulting from this project and they have confirmed that it will cause no adverse effects.

This project is not in conflict with the State's plan for achieving federal ambient air quality standards and we concur with the determination of the Department of Health and Environmental Sciences that this project will not have a significant adverse effect on air quality in the area.

During the construction phase of the projects, there will have to be some disruption of traffic. Detours will be used and there will probably be some short delays for traffic. The selected alignment will mimimize disruption to traffic in the Dayton area as traffic will be maintained on the existing highway while the new one is being built.

The noise impacts of the various alternate alignments studied are discussed in the Alternates Section. A complete noise study was also conducted for the selected alternate and the present traveled way. The results of this study are included in the Exhibits section in the Noise Study Report.

C. Impacts to the Flathead Reservation

Primarily there are three identification levels of impacts that could result to the Flathead Indian Reservation and its people. These impact levels include: (1) individual Indian property displacements (2) project area effects and (3) consequential impacts to the Flathead Indian Reservation. This review includes individual Indian property displacements and consequential impacts to the Flathead Indian Reservation. Project area effects have been described in detail within the alternate section of this environmental impact statement.

I. Individual Indian Property Displacements

Minority group impacts resulting from the acquisition of two parcels of Indian Lands for right-of-way purposes would have occurred with Alternates 5 and 6 had either been chosen. The remaining alternates as far as can be determined would not have involved Indian owned property.

Alternate 5 would involve a parcel of Indian Allotted Land (Allotment 2005) containing 60 acres. Right-of-way would require the removal of two dwelling unit structures located on the parcel at Station 1068 and Station 1072+60. The dwelling unit at Station 1068 is in poor condition and uninhabited. A second dwelling unit located at Station 1072+60 is presently unoccupied and used for storage purposes. Land required for right-of-way purposes consists of approximately 6 acres. The land is primarily used as grazing land and would be considered an uneconomical unit, therefore the damage should not be severe. Displacement of Indian or minority group households would not be required.

Alternate 6 would traverse the southeast corner of Tribal Trust Land in Section 4. Total acres included within this parcel of Tribal Trust Land is 73 acres. Right-of-way for Alternate 6 would touch one corner requiring approximately 2 acres. The land is presently in an undeveloped state and would not require relocation of minority group households.

The selected alignment is actually a modification of alternate No. 6. The modification consists of an easterly shift of about 400 feet to avoid crossing Tribal Trust Land. Therefore, the selected alignment will not affect either Indian Allotted Land or Tribal Trust Land.

II. Impacts to the Flathead Indian Reservation

Identification of Environmental, Social, and Economic Effects

In general it appears that the F191 (15) Elmo-Rollins and F191 (30) Flathead County Line South projects would tend, relative to socio-cultural

values, to create environmental and social impacts of a negative nature and have positive effects to the economy of the Flathead Indian Reservation. The following assumptions were made concerning socio-cultural values of the Confederated Salish and Kootenai Tribes with respect to their environment, social patterns, and economic motivation.

A. Assumptions

1. Environment

a. Tribal values reflect a strong conservationist position in retaining and preserving the Flathead Indian Reservation. Reservation preservation includes tribal lands, Indian allotted lands and non-Indian lands.

b. This previously mentioned conservationist approach extends to water, air, fish and wildlife habitat as well.

2. Social

a. Strong efforts are being made to retain identification with Salish and Kootenai cultural traditions.

b. Flathead Indian Reservation values are expressed through its own tribal political and administrative organizations.

c. A high value is placed on social interaction among Reservation members with a low value placed on social interaction between members and non-members.

d. The reservation has been progressive in the area of housing development attempting to gain adequate housing for all reservation members.

e. Greater and more convenient access to community facilities is favored by the Salish and Kootenai Tribes for reservation members as well as the development of specific community facilities for tribal member use.

3. Economic

a. The Flathead Indian Tribes are promoting the economic development and employment opportunities of the reservation for its members.

b. Greater access to employment opportunities for tribal members would be favored by the Flathead Indian Reservation.

B. Impacts - Positive or Negative

1. Environment

a. Any loss of natural features or wildlife habitat caused by the construction of the proposed highway projects would have a negative impact on the Flathead Indian Reservation. The selected alignment will result in some loss of natural features and wildlife habitat because it does not follow the existing route through Dayton.

b. The resultant lowering of natural environmental qualities with respect to wildlife and fish habitat, water, air, noise, and loss of open space either caused by the construction of the proposed highway projects within the project area or the further stimulation of non-reservation residential and strip commercial development within the project area and along the U. S. 93 alignment south through the reservation would have negative effects to the Flathead Reservation. This would include non-Indian permanent and seasonal residential and highway commercial development in the Dayton-Elmo-Big Arm-Polson Lake Shore areas and adjacent to the Pablo, Ronan, St. Ignatius, Ravalli, Arlee and Evaro communities.

c. The Reservation would negatively react to greater pressures placed on the Tribes for development of Indian lands by non-members as a result of the proposed highway projects.

d. Disruptive or divisive effects caused by the construction of the F191 (15) Highway Project through Dayton relative to Indian community members and the elementary school would not be favored by the Reservation.

2. Social

a. Highway project stimulated residential and commercial development and its accompanying non-Indian population would continue to cause a negative change in the Salish and Kootenai socio-cultural and environment features of the Flathead Indian Reservation.

b. The style of life of 176 Reservation members residing in the Dayton area would be negatively affected by the highway project impacts including changes in the relationship between the social areas of the reservation.

c. The aggregation of the Salish and Kootenai tribes with a past semi-successful resistance on the portion of the Reservation would be negatively changed by the project proposals further reducing the size of the Reservation (western portion) for cultural refuge.

d. Highway project stimulated land development and population growth would permanently change social attributes around which the Reservation was organized in the past.

e. A decrease may result in the number of tribal members along the U. S. 93 corridor in the Reservation by changing the population racial composition and lowering the possibility of Indian social relationships.

f. The proposed highway projects would provide more safe and convenient travel through the highway project area from Dayton to Elmo and other points within the Reservation thereby assisting tribal members in social interaction patterns.

g. Access and travel safety for students of junior and high school age of the 30 Indian households located in the highway project area to Polson would be improved.

h. Travel to Reservation - related public facilities and services located at Elmo, Ronan, and Dixon would be made more convenient for the Indian population of 176 located in the F191 (15) project area.

i. Religious facility access to churches located at Elmo, Ronan, Polson, and St. Ignatius would be ameliorated for the Project area's 30 Indian households.

j. Safety and reduced travel time for emergency vehicles providing service to the 176 Indian members within the Project area and access to medical facilities located in Polson, Ronan, and St. Ignatius would be improved.

3. Economic

a. Improved U. S. Highway 93 would assist economic development projects of the Flathead Indian Reservation through a safe, more efficient transportation system.

b. Employment opportunities located at the larger employment centers of Kalispell and Missoula and to proposed Reservation economic development projects would be made more accessible to project area minority group employees by the proposed improvements of the U. S. 93 system.

c. Regional shopping and service facilities located in Kalispell and Missoula would be made more convenient and accessible as a result of the proposed highway projects to Indian members of the Reservation and Project area.

III. PROBABLE ADVERSE ENVIRONMENTAL IMPACTS WHICH CANNOT BE AVOIDED

The adverse environmental impacts that cannot be avoided are as follows:

1) New right-of-way, including agricultural land, subdivided land and forested land, will have to be purchased for the project.
2) The construction process will disrupt the area and necessitate detours, traffic delays, etc.
3) Some air pollution will occur during the construction process.
4) Some water pollution will occur at the various creek crossings with the largest amount probably occurring in the vicinity of Dayton Creek where a new bridge will have to be built.
5) Three archaeological sites may be affected.
6) Because the selected alternate bypasses Dayton, some of the commercial establishments in the area may suffer economically due to reduced exposure and accessibility.
7) Several homes and businesses may require relocation.
8) Subdividing and development in the project area may increase due to the improved access that will be provided.
9) Noise will increase as traffic increases but will not exceed allowable standards.

IV. ALTERNATES

The following provides a narrative description of each alternate alignment proposed for projects F191 (15) and F191 (30). There are eleven (11) alignments discussed in this section, plus the "no-build" alternate, with eight (8) alignments within the limits of the F191 (15), Elmo-Rollins project and three (3) alternate alignments within the limits of the F191 (30), Flathead County Line-South project. These alignments are shown on the aerial photo prints in the Exhibits Section of this statement. All of the alignments studied have the same beginning and ending points. Each alternate may be just one alignment from its beginning to end or may be a combination of parts of one or more of the shown alignments.

The prepared alignments are being developed using a design speed of 60 M.P.H. wherever possible. The criteria for this design allows a maximum horizontal curvature of 5°00' and a maximum vertical grade of 5.0%. The majority of both projects will use this design criteria, however, there are two areas where this design cannot be maintained. One is on Alternate 1, opposite Cromwell Island, where a horizontal curve of 6°00' is used. This curve is well within the limits of a 50 mph design speed and with the new 55 mph speed limit, is a very acceptable design. The other area is on the Hill Alternate, in the area of Table Bay, where a vertical grade of 6.0% is used to reduce the amount of cut. Here again, this increase in grade is within the limits of 50 mph design criteria.

In addition to a description of each of the alternate alignments, this section also covers the various environmental impacts of each. Two

main classes of impacts were considered, one being the primary impact concerning the physical construction of the highway facility itself and its immediate environmental effects on the area and the other being the secondary impact concerning the changes reflected in the area as a result of the existence of the new highway. In some circumstances, primary and secondary effects were difficult to differentiate between since both short and long term effects could be associated with some impacts.

Primary impacts were linked to right of way requirements, structural units to be removed, or relocated, and impairments related to the function of existing land use activities. The following criteria were used in the evaluation of primary impacts:

(1) Residential

(a) Permanent and Seasonal

Within 1000 feet-represents the number of structures within 1000 feet of a proposed alternate that could be affected by a primary impact such as access, exposure, dust and noise during construction, etc.

Within 80 feet---represents all structures within 80 feet of proposed alignments which could possibly require demolition or relocation. This 80 feet is based upon a need of at least 160 feet of new highway right of way.

(2) Commercial

(a) Retail

Within 80 feet---represents the number of stores and gas stations

within 80 feet of a proposed alternate which would possibly have to be removed or relocated.

Affected by loss of through traffic-The number of retail structures that could have their business affected due to selection of another alignment.

(b) Motel-Cabins

Within 80 feet----Structures within 80 feet of an alternate which possibly would have to be removed or relocated.

Affected by loss of through traffic-The number of motel or cabin establishments that could have their business affected by loss of through traffic because of selection of another alignment.

(3) Industrial

Within 80 feet----The number of industrial structures located within 80 feet of centerline of proposed alignment possibly requiring removal or relocation.

(4) Recreational

(a) Parks

Within 80 feet----The number of recreational areas located within 80 feet of a proposed alternate.

(b) Fishing Access

Within 80 feet----The number of fishing access sites within 80 feet of a proposed alternate.

(c) Camping Areas

Within 80 feet ----The number of campgrounds that would be located within 80 feet of a proposed alternate.

(5) Community Facilities

(a) Elementary Schools

Within 1000 feet---This is a modified standard which under an ideal situation elementary schools should be located one-quarter mile from primary arterials in order to provide maximum walking distance of school children without crossing arterial highways.

(b) Churches

Within 80 feet-----Number of church structures located within 80 feet of a proposed alternate.

(c) Cemeteries

Within 80 feet-----The number of cemetery sites located within the potential right of way of a proposed alternate.

(6) Utilities

Water and Sewer

The number of possible impacts to an existing or proposed central water and/or sewer system at Dayton or Rollins relative to water mains and/or sewer trunk systems.

(7) Cultural

Historical and Archaeological Sites

Within 80 feet-----The number of known historical and archaeological sites located within 80 feet of the centerline of a proposed alternate.

(8) Agricultural

Farm Land, Range Land, Forest Land

The approximate acreage impact each proposed alignment would have to respective existing agricultural land use activities.

(9) Stream Crossing

Perennial and Intermittent

Number of stream crossings for each proposed alignment with an indication as to whether it is an existing or new crossing.

(10) Community Cohesiveness

Community cohesiveness concerns the effect that this project could have on Dayton and Rollins in regard to splitting or separating portions of the community or restricting growth in a certain area due to the physical barrier of the highway.

(11) Undeveloped Subdivision Disruption

Approximate acreage impact each alternate alignment would have on the subdivisions in the area.

(12) Congestion

Pertains to conflicts between local traffic and through traffic.

(13) Noise

Noise impact are based on three different important items: 1) Type of land use adjacent to the highway, 2) Design year (1999) traffic volumes, and (3) distance from the highway to the point in question. By using the nomograph method of noise prediction, and using the Noise Study Report for calibration,

it has been determined that for land use category B, which pertains to residences, motels, schools, churches, picnic areas, recreational areas, playgrounds and parks, that if the home or point of activity is within 78 feet, the design noise level of 70 dBA will be exceeded. For land use category C, which pertains to industrial or commercial properties, if the building or point of activity is within 30 feet, the design noise level of 75 dBA will be exceeded. Land used for farming, mining, logging, and grazing is considered to be undeveloped in regard to noise pollution. Impacts are based on the number of homes, businesses, etc. where the allowable noise levels will be exceeded.

Impacts of a secondary nature are concerned with the possible affects a highway facility once constructed would have on the area. Secondary impacts evaluated included:

(1) Land Use Activity

(2) Concentration-dispersion

(3) Dwelling unit density

The following information includes a full description, along with a discussion of both the secondary and primary impacts, of each alternate. At the end of the section, for comparison purposes, are tables which generally summarize the impacts of the various alignments. Also included is a table showing the estimated cost of each alternate. The Selected Alternate is discussed last.

ALTERNATE 1 - Elmo-Rollins (Full length of Project) (Not Selected)

(1) Residential

Alternate 1 could affect approximately 101 permanent and seasonal dwelling units primarily concentrated along Flathead

Lake Shore. Within the Dayton Community, Alternate 1 would further segregate its two neighborhood areas, lowering the quality of the existing residential environment and reducing the opportunity to provide less costly public services. This alternate would require the displacement of at least 1 and possibly 2 families and their dwellings. Several other buildings and sheds would also have to be moved or torn down.

(2) Commercial

An older bar structure would require removal or relocation by Alternate 1. Two remaining commercial structures at Dayton would require access reorientation to the Alternate 1 alignment.

(3) Industrial

Alternate 1 does not interfere with any industrial land use activities.

(4) Recreational

There are no known federal, state, or local parks or recreation areas which Alternate 1 would affect. The Juniper Beach State Fish and Game fishing access site would be affected in terms of direct vehicular ingress and egress and greater facility use. Accessibility to the Lake Mary Ronan Recreation Area would be affected only during the construction period. With improvement of access to Lake Mary Ronan greater demands may be placed on the recreational area's facilities.

(5) Community Facilities

Alternate 1 would have a detrimental impact on the elementary school facility located in Dayton. The proposed alignment would create a hazardous pedestrian condition for children crossing to and from school. Additional problems would be encountered with ingress and egress of

school vehicles. Minimal impacts would be made to church facilities by Alternate 1.

(6) Utilities

Should water and sewer utilities be constructed in Dayton as proposed in the Comprehensive Area-Wide Water and Sewer Plan-1970, Alternate 1 would disrupt plans for two water mains, a trunk sewer and a 4" force main. Should these utilities be constructed in the near future after construction of the proposed alignment, provisions could possibly be made for passage of water and sewer lines under the highway prior to completion of the highway project.

(7) Cultural

As far as has been determined, Alternate 1 may interfere with 3 known archaeological sites.

(8) Agricultural

Impacts to sub-irrigated farmland would be minimal with Alternate 1. However open rangeland utilized by the proposed alignment would consist of about 87 acres. Approximately one acre of private forested land consisting mainly of low density conifers and shrubs would have to be removed for the proposed right-of-way for Alternate 1.

(9) Stream Crossings

Alternate 1 would require expansion of one existing perennial stream crossing and provision of 4 new intermittent stream crossings.

(10) Community Cohesiveness

Even though the existing alignment of U. S. 93 passes through the center of Dayton, any new alignment with greater volumes of traffic, wider pavement widths, and larger right of way requirements would magnify the physical barrier. The barrier would have a negative effect

on the community cohesiveness of the homogenous single family residential districts at Dayton.

(11) Undeveloped Subdivision Disruption

Alternate 1 right-of-way would require approximately 27 acres through the presently developed subdivisions of Grinde, Cromwell Villa, Juniper Shores and Silver Salmon Shores. Impacts to the Cromwell Villa Subdivision are the greatest since the proposed alignment passes through the southern portion of the subdivision resulting in double frontage lots. The remaining tracts within this subdivision are over 10 acres in size and could be resubdivided staying within Montana State Board of Health Guidelines of 20,000 square feet per lot.

(12) Congestion

Alternate 1, particularly with respect to potential new residential growth, could cause increased congestion at points where the existing U. S. 93 alignment would intersect with Alternate 1 and at various points within the Dayton community.

(13) Noise

Future noise levels on Alternate 1 would be within the design allowables.

Secondary Impacts

(1) Land Use Activity Changes

With increased traffic volumes, development attractiveness relative to retail and service establishments will become greater, particularly in the Dayton area at the intersection of the new alignment and FAS 352. Easier accessibility and greater travel convenience coupled with increasing demands for recreation will place even greater demands on the project area for cabin sites and retirement housing.

(2) Concentration-Dispersion

The proposed alignment of Alternate 1 would have a moderate effect on the future configuration of land use. Since the present development of the F191 (15) project area is oriented for the most part toward the West Shore of Flathead Lake a "pulling back" of the U. S. 93 alignment would allow some dispersion of the primarily single family residential development between the F191 (15) project beginning and Dayton.

(3) Dwelling Unit Density

Because of the moderate dispersal effect of Alternate 1 the proposed highway facility should not create, in presently developed areas, an increase in dwelling unit densities. Should growth trends increase substantially as a result of increased traffic exposure and better accessibility to the project area, the "pulling back" effect of Alternate 1 could conceivably provide space for twice the present development without increasing the existing dwelling unit density.

ALTERNATE 2 - Elmo-Rollins - Segments 1, 2, 1 (Not Selected)

This alternate has the same beginning points as Alternate 1 and is the same alignment as Alternate 1 to about Station 1016+, as shown in the exhibit section. From this point to about Station 1050+ the alignment is north and west of Alternate 1 and is part of Alternates 2 and 6. Ahead of Station 1050+ to Station 1090+ the alignment is Alternate 2 only. From Station 1090+ ahead, Alternate 2 is the same as Alternate 1. Alternate 2 is shown in the exhibit section as a dashed line and is marked as ALT. 2. This alignment has a maximum horizontal curve of $4^{o}00$ at approximate Station 1000+ and a maximum vertical grade of 4.9% at about Station 1050+ to 1070+. The length of this alternate is 5.39 miles.

Primary Impacts

(1) Residential

Alternate 2 would affect the largest number of structures, 103 residential structures are within 1000 feet and two are within 80 feet. Other than impacts associated with Alternate 1 this alternate has few additional impacts to residential land use. This alternate would require the displacement of the same families as those noted under Alternate 1.

(2) Commercial

Other than impacts associated with Alternate 1 this alternate would have minimal impacts to retail and service activities.

(3) Industrial

Alternate 2 does not interfere with any industrial activities.

(4) Recreational

Other than impacts associated with Alternate 1 there are no known parks or fishing access areas which Alternate 2 would have an impact upon.

(5) Community Facilities

Other than impacts associated with Alternate 1, Alternate 2 would not affect churches, schools or any other community facilities.

(6) Utilities

Other than impacts associated with Alternate 1, Alternate 2 would not interfere with any known plans for water and sewer.

(7) Cultural

As far as has been determined, Alternate 2 may interfere with 2 known archaeological sites.

(8) Agricultural

Lands used for agricultural purposes would be impacted a minor amount in comparison to the other Alternates with the exception of Alternate 7. Little farmland and forestland would be disrupted. Greatest encroachment would come to open rangeland which would amount to about 87 acres.

(9) Stream Crossing

Other than impacts associated with Alternate 1, impingements to streams relative to crossings would be minimal.

(10) Community Cohesiveness

Since a major portion of the Alternate 2 alignment involves segments of Alternate 1, impacts associated with community cohesiveness would be the same as those described under Alternate 1.

(11) Undeveloped Subdivision Disruption

Alternate 2 right-of-way would require approximately 26 acres through the presently undeveloped subdivisions of Grinde, Cromwell Villa, Juniper Shores and Silver Salmon Shores. Effects to subdivisions caused by Alternate 2 would be similar to Alternate 2 effects would be less severe since the proposed alignment would pass directly through the center of the subdivision, allowing for more land area in which to subdivide as compared to the Alternate 1 alignment.

(12) Congestion

Same as Alternate 1

(13) Noise

Same as Alternate 1

Secondary Impacts

(1) Land Use Activity Changes

Changes in Land Use Activity patterns would be the same as described for Alternate 1.

(2) Concentration-Dispersion

The deviation of Alternate 2 from the Alternate 1 alignment would allow some additional dispersion of lake shore development within the area east of Alternate 2.

(3) Dwelling Unit Density

Alternate 2 would have slightly less of an increasing effect on dwelling unit density than Alternate 1.

ALTERNATE 3 - Elmo-Rollins - Segments 1, 3, 1 (Not Selected)

Alternate 3 is the same as "alternate 1" except between stations 1060± to 1090± where it lies just west of alternate 1 to avoid removing some buildings and a home. This alignment is shown as a dash, dash, dot, dot line on the maps in the exhibit section. This alignment has a maximum horizontal curve of $5^{o}00'$ at approximate station 1045± to 1060± and a maximum grade of 5.4% between stations 1040± to 1055±. The length of this alternate is 5.42 miles.

Primary Impacts

(1) Residential

Alternate 3, other than impacts associated with Alternate 1, would have minimal effects to permanent and seasonal dwelling residences. Approximately 101 residential structures would be included within 1000 feet of the combined alternate seg-

ments 1 and 3. Only two residential structures would be included within the possible right of way. This alternate would require displacement of the same families noted under Alternate 1.

(2) Commercial

Impacts resulting from Alternate 3, other than those found to potentially exist with respect to Alternate 1, would be minimal relative to retail and service activities.

(3) Industrial

Alternate 3 does not conflict with any industrial facilities.

(4) Recreation

There are no known recreational areas, parks or fishing access sites which Alternate 3 would have an impact upon other than those associated with Alternate 1.

(5) Community Facilities

Other than Alternate 1, impacts caused by Alternate 3 are minimal relative to schools, churches, and other community facilities.

(6) Utilities

In addition to Alternate 1 impacts, Alternate 3 would not interfere with any known water and sewer plans.

(7) Cultural

As far as has been determined, Alternate 3 does not affect any historical or archaeological sites other than those mentioned relative to Alternate 1.

(8) Agricultural

Impacts resulting from Alternate 3 to agricultural farm lands would be minimal. Sub-irrigated farm land and forest land

amounting to less than one acre would be involved with the proposed alignment. More severe, approximately 87 total acres of open range land would be disturbed.

(9) Stream Crossings

There would be few stream crossings involved with Alternate 3 other than those interrupted by Alternate 1.

(10) Community Cohesiveness

Since a major portion of the Alternate 3 alignment involves segments of Alternate 1, impacts relative to community cohesiveness would be similar to those described under Alternate 1.

(11) Undeveloped Subdivisions Disruption

Alternate 3 right of way requirements coupled with Alternate 1 demands would require approximately 27 acres through the previously mentioned undeveloped subdivisions of Grinde, Cromwell Villas, Juniper Shores and Silver Salmon Shores. Impacts to the Cromwell Villa subdivision would be similar to Alternate 1.

(12) Congestion

Potential traffic conflicts and congestion problems would be similar to Alternate 1.

(13) Noise

Future noise levels on Alternate 3 would be within the design allowables.

Secondary Impacts

(1) Land Use Activity Changes

Changes in land use activity patterns would be the same as described under Alternate 1.

(2) Concentration-Dispersion

Alternate 3 would have slightly more of a dispersing effect on lake shore development than that of Alternate 1 and would permit a more advantageous setback from the existing U. S. 93 alignment.

(3) Dwelling Unit Density

Alternate 3 would have less of a tendency to increase developed area dwelling unit densities than Alternate 1.

ALTERNATE 4 - Elmo-Rollins - Segments 1, 4, 1 (Not Selected)

Alternate 4 is the same alignment as Alternate 1 except in the area just north and east of Dayton, Station 1110± to 1140±, where the alignment stays on the existing roadway. This alignment is shown as a dotted line on the maps in the exhibit section. It has the same maximum horizontal curvature and vertical grade as does "Alternate 1". The length of this alternate is 5.44 miles.

Primary Impacts

(1) Residential

Deviation of Alternate 4 from Alternate 1 occurs within Dayton, more nearly following the existing U. S. 93 alignment. Total residential structures encompassed within 1,000 feet are 97 which is slightly less than the previous three Alternates. Four structures located in the Dayton Area are within 80 feet of the proposed alignment possibly requiring removal or relocation. This alternate would require the relocation of 4

families. Two of these are the same as those required for Alternate 1.

(2) Commercial

The Alternate 4 alignment within Dayton would bring the proposed highway facility within very close proximity (80 ft.) of a gas station-store and bar facility. Should acquisition of structures not be required, the loss of parking may in itself require relocation.

(3) Industrial

Alternate 4 does not disrupt any industrial land use activities.

(4) Recreation

Alternate 4, other than Alternate 1 impacts, would not affect known parks and fishing access sites. Minimal construction accessibility impacts would result to the intersection of F.A.S. 352 providing access to the Lake Mary Ronan Recreation Area.

(5) Community Facilities

The realignment of U. S. 93 (Alternate 4) would bring U. S. 93 traffic closer to the Dayton Elementary School site. This condition would result in a hazardous situation both to school children coming and going to school and those involved in playground activities. Additional undesirable impacts would be traffic conflicts caused by turning movements of school oriented vehicles, and more distractions and further degradation of the existing school environment. Minimal impacts would be made to churches located along the proposed Alternate 4 alignment at Dayton.

(6) Utilities

Should water and sewer facilities be constructed for Dayton as proposed in the Comprehensive Area-Wide Water and Sewer Plan - 1970, two water mains, one trunk sewer line, and a 4" force main would be interrupted. Should highway construction commence before the central systems are installed, provisions could possibly be made for passage of water main and sewer trunk lines under the highway.

(7) Cultural

As far as has been determined, Alternate 4 does not interfere with any known historical or archaeological sites other than those mentioned relative to Alternate 1.

(8) Agricultural

Aside from Alternate 7, Alternate 4 involves the least amount of agricultural lands. Farm lands and forest lands would remain basically untouched with approximately 85 acres of open range land disturbed.

(9) Stream Crossings

Alternate 4 total stream crossing would require expansion of one existing stream crossing and the bridging of 4 intermittent streams at new crossings.

(10) Community Cohesiveness

Although the Alternate 4 alignment basically follows the existing U. S. 93 alignment through Dayton, the widening of the highway facility would still bisect the community creating a physical barrier between the two residential areas. Minor disruption would result to the existing fragmented

Dayton commercial area.

(11) Undeveloped Subdivision Disruption

Impacts resulting to presently undeveloped subdivisions in the form of right of way requirements would amount to about 27 acres. Subdivisions infringed upon include Grinde, Cromwell Villa, Juniper Shores and Silver Salmon Shores.

(12) Congestion

Traffic conflicts and congestion would be similar to Alternate 1.

(13) Noise

Three buildings where noise problems could occur will require relocation which would thus eliminate the conflict.

Secondary Impacts

(1) Land Use Activity Changes

Changes in the land use pattern would be similar to those described under Alternate 1.

(2) Concentration-Dispersion

Effects resulting in concentration and/or dispersion would be similar to those described under Alternate 1.

(3) Dwelling Unit Density

Changes in dwelling unit densities would resemble Alternate 1 inclinations.

ALTERNATE 5 - Elmo-Rollins - Segment 5, 1 (Not Selected)

"Alternate 5" has its beginning about 1.5± miles east of Elmo on U. S. 93. It is west and north of Alternate 1 and has the most extreme change from the existing roadway. This

alignment ties to Alternate 1 at about Station 1150+ and from there forward is the same as "Alternate 1". It is shown in the exhibit section as the line having the long dash, 3 short dashes and is marked as Alternate 5. This alignment has a maximum horizontal curve of $2^{o}45'$ and a maximum vertical grade of 5.0% and may possibly require a climbing lane. It is also the longest alternate on the F191 (15), Elmo-Rollins, project, with a length of 6.37 miles.

Primary Impacts

(1) Residential

Alternate 5 would have the least impact to residential permanent and seasonal structures. As a result of its bypass alignment, only 22 residential structures are located within 1000 feet and one vacant house within 80 feet of the proposed alternate. No displacement of families would be necessary. The vacant house that would require relocation or demolition is Indian owned.

(2) Commercial

Alternate 5 would have some economic impact on the three highway oriented retail activities located in Dayton. The removal of through traffic exposure would result in at least a temporary negative economic impact. Motel and cabin accommodations would not be affected by Alternate 5.

(3) Industrial

Alternate 5 would not interfere with any industrial land use activities.

(4) Recreational

Other than Alternate 1 impacts, Alternate 5 would not alter any established park areas or fishing access sites. Alternate 5 would modify accessibility to areas west of the proposed alignment with respect to hunting, hiking, sightseeing and other recreational opportunities.

(5) Community Facilities

Due to the bypass nature of Alternate 5 minimal impacts would result to community facilities.

(6) Utilities

Alternate 5, due to its bypass nature, would not interfere with any known plans for public utilities.

(7) Cultural

As far as has been determined, Alternate 5 would not interfere with any local historial or archaeological sites.

(8) Agricultural

Alternate 5 would have the most severe impacts to agricultural lands. The Alternate 5 system would require about 20 acres of improved or sub-irrigated farm lands, approximately 95 acres of open range land and about 9 acres of forest lands. Forest lands involved primarily include low density conifers, with shrubs and deciduous tree varieties located along Dayton Creek.

(9) Stream Crossings

The Alternate 5 would require 2 new stream crossings over perennial streams along with provision for expansion of an existing crossing and 2 new crossings over intermittent streams.

(10) Community Cohesiveness

As a result of the Alternate 5 alignment bypassing Dayton, little disruption would be caused to the existing community configuration.

(11) Undeveloped Subdivision Disruption

Impacts to undeveloped subdivisions by Alternate 5 would amount to about 17 acres.

(12) Congestion

By the removal of through traffic, conflicts with local traffic would be minimized. Local traffic conflicts and congestion potentials would be minimized due to the circumberential location of the Alternate 5 alignment.

(13) Noise

Future noise levels on Alternate 5 will be within the design allowables.

Secondary Impacts

(1) Land Use Activity Changes

Future commercial development (retail and services) would be attracted or pulled toward the Alternate 5 alignment. This shift would potentially take place between the Alternate 5 intersection with F.A.S. 352 and Alternate 1 intersection. Modifications in the land use pattern would be from agricultural farmland and rangeland to more intense retail and service activities. With the "pull back" effect of Alternate 5 alignment and improved accessibility a considerable amount of rangeland could potentially be converted to residential subdivisions.

(2) Concentration-Dispersion

Alternate 5 would have a dispersion effect to new development as a result of opening up a considerable amount of rangeland for new subdivisions. The new Alternate 5 coupled with the present U. S. 93 alignment would increase the accessibility and attractiveness of the area for development.

(3) Dwelling Unit Density

Densities as a result of new development on existing agricultural lands would increase while dwelling unit densities along the lake shore would for the most part remain stable.

ALTERNATE 6 - Elmo-Rollins - Segments 1, 2, 6, 1 (Not Selected)

This alternate has the same beginning as Alternate 1 and follows Alternate 1 from the beginning of the project to about Station 1016±. From 1016± to 1050± this alternate is the same as "Alternate 2". From 1050± to 1140± Alternate 6 lies west of "Alternates 1, 2, 3, 4 and 7" and west of Dayton. It is shown in the exhibit section as a dash, 3 dots, dash line. From Station 1140± to the end of the project this alternate is the same as Alternate 1. This alignment has a maximum horizontal curve of 5°00' at approximate Stations 1045± to 1070± and a maximum vertical grade of 5.0% at about Station 1030± to 1080±. The length of this alternate is 5.80 miles.

Primary Impacts

(1) Residential

Alternate 6, due to the close proximity of the bypass alignment to Dayton, encompasses 79 residential structures within 1000 feet which is slightly greater than Alternate 5 but less

than the other Alternates. There are no structures located within 80 feet of the proposed highway facility and no relocation would be necessary.

(2) Commercial

Due to the bypass nature of the route, minimal negative economic impacts would result to Dayton business establishments as a result of rerouting through traffic. Alternate 6 would not involve primary impacts to existing motel and cabin development.

(3) Industrial

Alternate 6 does not interfere with any industrial land use activities.

(4) Recreational

Other than Alternate 1 impacts, established parks, recreation areas, picnic areas, fishing access areas, and camping areas would not be encroached upon by Alternate 6. To a lesser degree than Alternate 5, impacts could be related to a reduction in recreational opportunities such as hunting and hiking due to diminished accessibility to the area west of the proposed alignment. Land along the Flathead Lake Shore to a large degree is already under private ownership, therefore, little reduction in recreational opportunities is experienced. Access to the private beaches utilized by the public would not be reduced by Alternate 6.

(5) Community Facilities

Due to the bypass configuration of Alternate 6, impacts to community facilities would be kept to a minimum. The proposed alignment would pass within 1300 feet of an Indian Cemetery located west of Dayton.

(6) Utilities

Alternate 6, although having a bypass alignment around Dayton, could intercept a proposed site for a storage reservoir as well as a water main system connecting the reservoir to the proposed Dayton central water facility.

(7) Cultural

As far as has been determined, Alternate 6 could interfere with two local historical or archaeological sites.

(8) Agricultural

Alternate 6 would have slightly less of an effect to agricultural activities than Alternate 5. Agricultural land involved with the Alternate 6 alignment includes about 14 acres of sub-irrigated farmland, 90 acres of open rangeland, and 2 acres of forestland.

(9) Stream Crossing

Stream Crossings involved with Alternate 6 would include 2 new structures over perennial streams, and in addition to new structures, the expansion of an existing crossing over intermittent streams.

(10) Community Cohesiveness

The Alternate 6 alignment although located in closer proximity to Dayton than Alternate 5, would still have minimal impacts to community cohesion due to the bypassing nature of the proposed alignment. Restriction could conceivably be placed on western growth of the Dayton community, however, present growth estimates included within the Comprehensive Area Wide Water and Sewer Plan-1970, indicates a moderate growth of 80 additional

persons by 1990. According to the water and sewer plan this additional population will be accommodated within the existing community site.

(11) Undeveloped Subdivision Disruption

Existing undeveloped subdivisions would be most disrupted by Alternate 6 requiring approximately 29 acres of right of way from the Grinde, Cromwell Villa, Juniper Shores, and Silver Salmon Shores subdivisions. Greatest subdivision impacts of Alternate 6 would be to Cromwell Villa located just south of Dayton.

(12) Congestion

Conflicts between through traffic and local traffic within the Dayton community would be minimized.

(13) Noise

There appear to be no noise problems connected with this alternate

Secondary Impacts

(1) Land Use Activity Changes

Future commercial development, as with Alternate 5, would have a tendency to move north toward the Alternate 6 alignment particularly in the area between the intersections of F.A.S. 352 and Alternate 1. Outside the Dayton Community, along the Alternate 6 alignment, some land use activity changes will occur from rangeland to residential development, most likely in areas already experiencing land subdivision at the present time.

(2) Concentration-Dispersion

Alternate 6 would have a slightly greater dispersing effect on future development than the other Alternates with the ex-

ception of Alternate 5.

(3) Dwelling Unit Density

Dwelling unit densities would have a tendency to increase on present undeveloped rangeland areas but would help reduce the probability of increasing existing residential development densities along the lake shore.

ALTERNATE 7 - Elmo-Rollins - Segments 7, 1 (Not Selected)

Alternate 7 has the same beginning, with the exception of Alternate 5, as the rest of the alternates involved with this project. This alternate is the existing roadway from its beginning to Dayton Creek. From Dayton Creek to the end of the project this alignment becomes the same as Alternate 1. This alignment is shown in the exhibit as a long dash, dot, dot line. It has a maximum horizontal curve of $6^{o}30'$ at about Station 1050± to 1060± and a maximum vertical grade of 4.0% at approximate Stations 1085± to 1100±. The length of this alignment is 5.48 miles.

Primary Impacts

(1) Residential

Effects caused by expansion of U. S. 93 (Alternate 7) with respect to its close proximity to lake front residential area would be severe to permanent and vacation residences. Not only would the additional right-of-way requirements for the facility be detrimental with respect to substandard lots (below 20,000 sq. ft. requirements of the Montana Department of Health), but increased of future traffic activity would produce the same impacts to the Dayton Community as Alternate 1. This alternate would require the relocation of at least 10 permanent homes, 3 seasonal homes, and several sheds, garages, etc.

(2) Commercial

Other than impacts associated with Alternate 1, Alternate 7 would appear to have minimal effects on commercial, retail, and service activities.

(3) Industrial

Alternate 7 would not interfere with any industrial land use activities.

(4) Recreational

Expansion of the U. S. 93 alignment (Alternate 7) would have some effect on the Juniper Beach fishing access and camping site located approximately midway between Elmo and Rollins. The new roadway would have to be fit into the existing right-of-way to avoid encroachment on the area. The main impacts to the recreational environment would be increased traffic activity, greater adjacent dwelling unit increases, and probable alteration of the landscape in the vicinity of the site.

(5) Community Facilities

Other than impacts associated with Alternate 1, effects to schools, churches or other community facilities would be minimal by Alternate 7.

(6) Utilities

Other than Alternate 1 impacts, Alternate 7 would not disrupt any known water and sewer plans.

(7) Cultural

As far as has been determined, Alternate 7 could effect 2 known historical or archaeological sites.

(8) Agricultural

Impacts to agricultural lands as a result of the Alternate 7 system would be minimal. Agricultural lands disturbed include approximately 60 acres of open rangeland and 2 acres of low density forestland.

(9) Stream Crossings

Alternate 7 would require expansion of the following existing crossings: one crossing on Dayton Creek, a perennial stream and three intermittent stream crossings.

(10) Community Cohesiveness

Effects to Dayton relative to community land use impacts would be similar to those described under Alternate 1 since the portion of Alternate 1 passing through Dayton would be utilized in conjunction with the Alternate 7 alignment.

(11) Undeveloped Subdivision Disruption

Alternate 7 would have considerable impact on the Grinde subdivision since the lots presently just meet the 20,000 sq. ft. requirements of the Montana State Board of Health. In order to gain required right-of-way widths, tracts within the Grinde subdivisions would be reduced to a substandard status for individual water wells and septic tanks.

(12) Congestion

Due to the large number of access points from commercial and residential structures along the existing alignment, coupled with increased traffic on the new highway facility, congestion and traffic conflicts could potentially become hazardous.

(13) Noise

Future noise levels on Alternate 7 would not exceed the design allowables.

Secondary Impacts

(1) Land Use Density Changes

Few land use activity changes would occur over and above those subdivided areas taking place at the present time. Some additional subdivision activity may take place along the lake shore. With increased traffic volumes, encouragement may be given to new commercial development within the Dayton community and along the lake shore.

(2) Concentration-Dispersion

This lake shore alternate would have a severe impact to existing residential and recreational development as well as perpetuate a concentrating influence on limited lake frontage.

(3) Dwelling Unit Density

Alternate 7 would tend to minimize dwelling unit density increases on rangelands to the west of the proposed alignment, excluding existing subdivision activity, while fostering dwelling unit density increases along the lake shore.

Selected Alternate - Elmo-Rollins

The selected alternate is a slight modification of Alternate 6. Just west of Dayton the selected alignment has been shifted about 400' feet closer to Dayton than the original Alternate 6. It is shown on Exhibit No. 2 as a heavy solid line. The alignment is the same as Alternate 6 elsewhere. This alignment also

has a maximum horizontal curve of 5° at Stations 1045± to 1070± and a maximum vertical grade of 5.0% at about Station 1030± to 1080±. The length of this alternate is 5.79 miles.

Primary Impacts

(1) Residential

The selected alternate, due to the close proximity of the bypass alignment to Dayton encompasses 85 residential structures within 1000 feet which is slightly more than Alternate 5 or 6 but less than the other alternates. There are no structures located within 80 feet of the proposed highway facility and no relocation will be necessary.

(2) Commercial

Due to the bypass nature of the route, minimal negative economic impacts would result to Dayton business establishments as a result of rerouting through traffic. Alternate 6 would not involve primary impacts to existing motel and cabin development.

(3) Industrial

The selected alternate does not interefere with any industrial land use activities.

(4) Recreational

Other than Alternate 1 impacts, established parks, recreation areas, picnic areas, fishing access areas, and camping areas would not be encroached upon by this route. To a lesser degree than Alternate 5, impacts could be related to a reduction in

recreational opportunities such as hunting and hiking due to diminished accessibility to the area west of the proposed alignment. Land along the Flathead Lake Shore to a large degree is already under private ownership, therefore, little reduction in recreational opportunities is experienced. Access to the private beaches utilized by the public would not be reduced by the selected alternate.

(5) Community Facilities

Due to the bypass configuration of this alternate, impacts to community facilities would be kept to a minimum. The proposed alignment would pass within 1300 feet of an Indian Cemetery located west of Dayton.

(6) Utilities

The selected alternate, although having a bypass alignment around Dayton, could intercept a proposed site for a storage reservoir as well as a water main system connecting the reservoir to the proposed Dayton central water facility.

(7) Cultural

As far as has been determined, the selected alignment interferes with three local historical or archaeological sites.

(8) Agricultural

This selected alignment would have slightly less of an effect to agricultural activities than Alternate 5. Agricultural land involved with this Alternate alignment includes about 14 acres of sub-irrigated farmland, 90 acres of open rangeland, and 2 acres of forestland.

(9) Stream crossings involved with the selected alternate would include 2 new structures over perennial streams, and in addition to new structures, the expansion of an existing crossing over an intermittent stream. Some water pollution will occur to Dayton Creek during construction. Also, some streambank vegetation will be lost due to the project construction.

(10) Community Cohesiveness

The selected alignment although located in closer proximity to Dayton than Alternate 5, would still have minimal impacts to community cohesion due to the bypassing nature of the proposed alignment. Restriction could conceivably be placed on western growth of the Dayton community, however, present growth estimates included within the Comprehensive Area Wide Water and Sewer Plan-1970, indicates a moderate growth of 80 additional persons by 1990. According to the water and sewer plan this additional population will be accommodated within the existing community sites.

(11) Undeveloped Subdivision Disruptions

Existing undeveloped subdivisions would be most disrupted by this route requiring approximately 29 acres of right of way from the Grinde, Cromwell Villa, Juniper Shores, and Silver Salmon Shores subdivisions. Greatest subdivision impacts of this route would be to Cromwell Villa located just south of Dayton.

(12) Congestion

Conflicts between through traffic and local traffic within the Dayton community would be minimized.

(13) Noise

It appears there will be no noise problems due to the construction of this alternate. See the Noise Study Report in the Exhibits sections.

Secondary Impacts

(1) Land Use Activity Changes

Future commercial development, as with Alternate 5, would have a tendency to move north toward the Alternate 6 alignment particularly in the area between the intersections of F.A.S. 352 and Alternate 1. Outside the Dayton Community, along this Alternate alignment, some land use activity changes will occur from rangeland to residential development, most likely in areas already experiencing land subdivision at the present time.

(2) Concentration-Dispersion

The selected Alternate would have a slightly greater dispersing effect on future development than the other Alternates with the exception of Alternate 5.

(3) Dwelling Unit Density

Dwelling unit densities would have a tendency to increase on present undeveloped rangeland areas but would help reduce the probability of increasing existing residential development densities along the lake shore.

Alternates for the F191 (30), Flathead County Line South, project all begin on U. S. 93, F.A.P. Route #5, at a point 2.0± miles east of Dayton. This beginning point is at Station 1231+90.8 as shown on the maps in the exhibit section.

P. T. W. (Present Traveled Way) ALTERNATE - Flathead County Line South (Selected Alternate)

The PTW alternate, the slected alternate, begins at Station 1232+ and is shown in the Exhibit Section as a solid line. This alignment follows the existing roadway from the beginning to the end of the project and is common to the "Hill Alternate" in the areas stated below: Station 1232+ to 1250+, 1340+ to 1370+, 1470+ to 1535+, and 1580+ to the end of the project. This alignment will have maximum horizontal curve of 5°00 on several of the curves used in this alignment and a maximum vertical grade of 5.0% about Station 1400+ to 1430+. The length of this alignment is 7.73 miles.

Primary Impacts

(1) Residential

The P. T. W. Alternate will encompass approximately 101 permanent and seasonal structures within 1000 feet and 2 dwellings within 80 feet. In areas where the existing alignment comes within close proximity to the lake shore, such as the small cluster of cabins located one-half mile north from the beginning of project F191 (30), expansion of the P. T. W. alignment will have severe impacts to the residential environment in terms of increased traffic activity, reduced yard area and a lowering of recreational qualities. Minimal to moderate impacts will result to residential development through the Rollins area. Of the 2 dwellings mentioned above, only one is presently occupied. Relocation of this family will be necessary. The other dwelling appears to be a vacant rental unit and will also require relocation.

(2) Commercial

A combination post office-grocery store, a small cabin development and a store facility in the Rollins area will have to be either removed or relocated should the total 160 feet right-of-way be required.

Additional impacts in terms of accessibility will occur to a restaurant-inn facility and motel accommodations located at the north end of the project as a result of the P.T.W. alignment deviation from existing U. S. 93. One mile south of the West Shore State Park at Smith Camp, 3 small cabin structures are located within 80 feet of the proposed P.T.W. alignment. Four establishments could potentially be affected by a loss of through traffic.

(3) Industrial

There are no industrial facilities involved with the P.T.W. Alternate.

(4) Recreational

The P.T.W. Alternate will have minor impacts to F191 (30) project area recreational facilities. Included will be minor accessibility problems to the Flathead Lake Shore, additional traffic activity and perhaps more visitors to the area for recreation as a result of increased exposure to larger volumes of traffic.

(5) Community Facilities

The P. T. W. Alternate, other than possibly increasing facility demand and accessibility, will not affect the local elementary school facility at Rollins.

(6) Utilities

The P.T.W. Alternate will not affect water, sewer or power transmission facilities. The P. T. W. Alternate will interrupt one water main and a 4" force sewer main as proposed in the Comprehensive Area Wide Water and Sewer Plan-1970.

(7) Cultural

As far as has been determined, the P. T. W. Alternate will not invade any historical or archaeological sites.

(8) Agricultural

Encroachments on agricultural lands by the P. T. W. Alternate include approximately 20 acres of improved farmland, 15 acres of rangeland and 53 acres of forested land.

(9) Stream Crossings

Only one new crossing will be required over a perennial stream, this will be at Forrey Creek. Interception of the P. T. W. Alternate with intermittent streams will require expansion of 4 existing crossings.

(10) Community Cohesiveness

The P. T. W. Alternate for the most part will involve few impacts to the community cohesiveness of Rollins. The major portion of residential development is south of the proposed P. T. W. alignment and commercial establishments along existing U. S. 93 are few, resulting in little impact. The P. T. W. Alternate could restrict future northward residential development. However, as indicated in the Comprehensive Area Wide Water and Sewer Plan-1970, while growth is anticipated north of the Rollins community, a small area adjoining the U. S. 93 alignment just west of Rollins is also denoted for possible residential development. The Area Wide Water and Sewer Plan forecasts an additional 50 persons within Rollins by 1990.

(11) Undeveloped Subdivision Disruption

Few residential subdivisions are known to be affected by the P. T. W. Alternate. It will have a minor effect on future development should the population forecasts hold true. The Alternate will retain new development between the highway alignment and lake shore. Following the existing U. S. 93 Alignment will not be as severe in the F191 (30)

project area as it was in the F191 (15) project area due to the existing alignment being located back from the lake shore.

(12) Congestion

Due to the large number of ingress and egress points, poor vertical and horizontal visibility and increased traffic volumes, congestion and traffic conflicts could result, particularly if additional commercial activities were attracted to the area.

(13) Noise

There will be approximately 6 conflicts with the allowable noise standards on this alternate. These conflicts are homes and businesses which will be in the R/W take and require relocation or removal, which would thereby eliminate the noise conflict.

Secondary Impacts

(1) Land Use Activity Changes

Increased changes in land use activity could result from greater exposure of persons traveling through the F191 (30) area. With increased traffic volumes, greater pressure may evolve for new development near the Rollins area.

(2) Concentration - Dispersion

The P. T. W. Alternate, relative to the other two alternates, will have a minor effect on future development by retaining permanent and seasonal houses for the most part between the existing highway alignment and the lake shore. The impact is not as severe on the F191 (30) project area as was in the F191 (15) project area due to the existing alignment being located back from the Lake shore and topographic limitations.

(3) Dwelling Unit Density

The P. T. W. Alternate will have minimal effects on increases in dwelling unit density.

HILL ALTERNATE - Flathead County Line South (Not Selected)

This alignment also begins at Station 1232+ and is common to the "P.T.W. Alternate" to Station 1250+. From Station 1250+ to 1340+ this alignment is west and north of the existing roadway or P.T.W. Alternate. From Station 1340+ to 1370+ it is again common with the P.T.W. Alternate. From 1370+ to 1470+ the Hill Alternate lies north of the existing roadway and from Station 1470+ to 1535+ the two alignments are common again and follow the existing roadway. From Station 1535+ to 1580+ the Hill alignment is west and north of the existing roadway. From 1580+ to the end of the project the two alignments (Hill and P.T.W.) are again common. This alignment is shown in the exhibit section as a dashed line. The alignment has a maximum horizontal curve of 5^{o} 00' and a maximum vertical grade of 6.0% at about Stations 1560+ to 1577+ and its length is 7.56 miles.

Primary Impacts

(1) Residential

The Hill Alternate affects the least number of housing units but would include 67 residential structures within 1000 feet and 3 dwelling units, 4 barns or sheds, and 1 garage within 80 feet. Two of the dwellings within 80 feet appear to be occupied and three families will have to be relocated. The major residential concentrations included within 1000 feet occur in the Rollins area.

(2) Commercial

Selection of the Hill Alternate alignment would have modified business conditions with respect to the absence of through traffic exposure to the following local establishments; two small combination

gas station-grocery stores, a museum-souvenir shop, a small facility providing cabin facilities and fish camp. Access problems would develop relative to a restaurant-inn and motel facilities.

(3) Industrial

There are no industrial facilities involved with the Hill Alternate and it would not affect any industrial land use activities.

(4) Recreational

The Hill Alternate would reduce exposure to local beaches and private recreational facilities because of the greater distance from the lake shore. A private campground facility located just south of Rollins would be severely encroached upon by the Hill Alternate and possibly would require removal or relocation. The West Shore State Park would not be affected.

(5) Community Facilities

Only minimal effects in terms of accessibility to churches and schools are involved with the Hill Alternate. This impace is mainly concentrated in the Rollins area and affects a church camp and elementary school.

(6) Utilities

Same at the P.T.W. Alternate.

(7) Cultural

As far as has been determined, the Hill Alternate would not invade any historical or archaeological sites.

(8) Agricultural

Hill Alternate right of way requirements would utilize approximately 35 acres of improved farmland, 18 acres of rangeland and 51 acres of forestland. There is a possibility that one orchard near the Rollins

Area would be encroached upon.

(9) Stream Crossings

One new stream crossing would be required at Forrey Creek, a perennial stream, two new crossings would be required on intermittent streams, and two existing intermittent stream crossings would require expansion.

(10) Community Cohesiveness

The Hill Alternate would have minimal effects to the existing community land use pattern of the Rollins Area.

(11) Undeveloped Subdivision Disruption

Little known disruption would occur to present sub-division activity.

(12) Congestion

The Hill Alternate could have the most effective alignment relative to separating through traffic from local oriented traffic and turning movements.

(13) Noise

There are approximately 3 homes, cabins, etc. adjacent to this project where the allowable noise levels may be exceeded. These conflicts will be within the R/W take and require relocation or removal, which would thereby eliminate the noise conflict.

Secondary Impacts

(1) Land Use Activity Changes

Minor changes to the land use pattern may evolve relative to retail and service establishments. These establishments would tend to re-orient themselves to the new alignment utilizing existing farm acreage. This re-orientation coupled with the new alignment could intrude upon lands of potential agricultural value, namely orchards.

(2) Concentration-Dispersion

With the pulling back of the Hill Alternate from the existing U. S. 93 alignment and lake shore, a moderate dispersion effect may result in future growth trends.

(3) Dwelling Unit Density

The dispersion effect could result in maintaining dwelling unit densities along the lake shore and providing a slight increase in residential densities within the area between the new highway alignment and the lake shore. The possibility of this happening improves with the increased accessibility provided by both the existing U. S. 93 and Hill Alternate alignments.

MODIFIED P. T. W. (Present Traveled Way) ALTERNATE - Flathead County Line South (Not Selected)

This alignment is the "P.T.W. Alternate" except between Stations 1370± to 1470± and 1520± to 1580± and is shown in the exhibit section as a dash-dot line. From Stations 1370± to 1430± the alignment is north of the existing roadway or P. T. W. Alternate. From Stations 1520± to 1580± the alignment is east of or almost on the existing roadway. This alignment has a maximum horizontal curve of $5^{o}00'$, a maximum vertical grade of 5.0% and its length is 7.77 miles.

Primary Impacts

(1) Residential

The P.T.W. Modified Alternate would encompass approximately 92 residential structures within 1000 feet and 4 residences within 80 feet. The major portion of the intermixed permanent and seasonal residences are located along the Lake Shore in the Rollins Area. Relocation of families would be required for all 4 of the residences within 80 feet.

(2) Commercial

Three retail establishments located along the P.T.W. Modified Alternate would be affected to some extent by a loss of through traffic should the Hill Alternate Alignment be selected. Smith Camp located in the northern portion of the project area would be bisected by the P.T.W. Modified alignment.

(3) Industrial

Land use activities of an industrial nature would not be affected by the P.T.W. Modified alignment.

(4) Recreational

Same as P.T.W. Alternate.

(5) Community Facilities

Same as the P.T.W. Alternate

(6) Utilities

Same as P.T.W. Alternate

(7) Cultural

The P.T. W. Modified Alternate would not transgress any known historial or archaeological sites.

(8) Agricultural

Land use types of an agricultural nature which would be utilized by the P.T.W. Modified alignment would include approximately 26 acres of farmland, 13 acres of rangeland, and 59 acres of forest land.

In comparison to the other two alternates the P.T.W. Modifed Alternate involves fewer acres of range land but a greater amount of forest land areas. These additional forest land acres are located in the Table Bay area where the P.T.W. Modified Alternate deviates from the P.T.W.

(9) Stream Crossings

The same number of crossings are required for all alternate proposals. Differences result in the types of crossings over the intermittent streams. One new crossing is required over the perennial stream of Forrey Creek near Rollins. One new crossing would be required over an intermittent stream while three existing site crossings would require expansion.

(10) Community Cohesiveness

The Rollins community organization would be little affected by the P.T.W. Alternate. Other than impacts described under the P.T.W. Alternate and the reorientation of existing retail and service facilities to the new alignment in the Rollins area, effects would be minimal.

(11) Undeveloped Subdivision Disruption

The P.T.W. Modified alignment would not involve any know residential or commercial oriented subdivisions.

(12) Congestion

The P.T.W. Modified Alternate would fall somewhere midway between the Hill and the P.T.W. Alternates relative to traffic conflicts.

(13) Noise

This Alternate would cause approximately 4 noise impacts. They consist of residences which will be within the R/W take, thus eliminating the noise conflict.

Secondary Impacts

(1) Land Use Activity Changes

Basically the same as the P.T.W. Alternate. However with reorientation occurring to the new alignment, most service and use

changes could take place to the northeast of Rollins in the Table Bay area. With the close proximity to the lake shore and disruption of existing land use, the highway alignment could provide environmental features which would be commercially capitalized upon such as motels, restaurants, etc. In addition the fragmentation of land parcels between the proposed and existing U. S. 93 alignment would make a number of small tracts of land available for sale.

(2) Concentration-Dispersion

Same as the P.T.W. Alternate with possibly more of a concentrating effect on development between the existing U. S. 93 alignment and P.T.W. Modified alternate.

(3) Dwelling Unit Density

Same as the P.T.W. Alternate. Density increases relative to dwelling units would be similar to those discussed under the P.T.W. Alternate.

"NO-BUILD" ALTERNATE (Not Selected)

The "no-build" alternate was also considered, however, it would not provide a safe and efficient transportation facility for the traveling public. The existing highway has 22-24 foot paved top and the alignment is very poor with numerous sharp, dangerous curves which contribute to hazardous visual-access conflicts. Since this highway is a main north-south route through Montana and carries a large volume of traffic, it certainly warrants reconstruction to provide a safer and more adequate highway. The need for this improvement is based on the deficiencies of the existing facility and the expected increase in traffic volume. The sufficiency ratings listed in Section 1, which have been developed by the State of Montana Department of Highways in cooperation with the Federal Highway Administration, demonstrate the

need for the improvement of the existing highway involved in this project. The existing highway rating is 34 and a sufficiency rating of 40 or below indicates a section of rural primary highway that should be reconstructed immediately.

An accident analysis of the 13 miles of existing highway shows that about 80 accidents occurred between January 1, 1972 and December 31, 1974. This provides an accident rate, based on the average daily traffic and the number of accidents occurring, of 3.77 as compared to a statewide average of 2.7. This also indicates a need to improve the existing facility. Adoption of the no-build alternate would have several advantages. Among them would be the following: 1) No money materials, labor, etc. would be expended 2) No new right-of-way would be required. 3) There would be no disruption of the area due to the construction process.

SUMMARY

For comparative purposes, the following tables provide a summary of both the primary and secondary impacts of each alternate. The last table provides estimated construction, right-of-way, utility and relocation costs, along with the total estimated cost for each alternate

INVENTORY OF IMPACT INCIDENTS

F 191 (15) - Elmo-Rollins

F 191 (30) Flathead County Line - So.

Primary Impacts	Alt. 1 1	Alt. 2 1,2,1	Alt. 3 1,3,1	Alt. 4 1,4,1	Alt. 5 5,1	Alt. 6* 1,2,6,1 As Modified	Alt. 7 7,1	PTW *	HILL	PTW Modified
(1) Residential-Permanent and seasonal residences										
Within 1000 ft.	101	103	101	97	22	85	101	101	67	92
Within 80 ft.	2	2	2	4	0	--	13	2	3	4
(2) Commercial Retail										
Within 80 ft.	1	1	1	2	--	--	1	2	--	0
Affected by loss of through traffic	2	2	2	1	--	--	2	4	--	3
Motels-Cabin										
Within 80 ft.	--	--	--	--	--	--	--	4	--	1
Affected by loss of through traffic.	--	--	--	--	--	--	--	2	--	1
(3) Industrial										
Within 80 ft.	--	--	--	--	--	--	--	--	--	--
(4) Recreational Parks										
Within 80 Ft.	--	--	--	--	--	--	--	1	1	1
Fishing Access within 80 ft.	1	1	1	1	0	1	1	--	--	--
Camping Area within 80 ft.	1	1	1	1	0	1	1	--	1	--
(5) Community Facilities										
Elementary Schools within 1000 ft	1	1	1	1	--	--	1	--	--	--
Churches within 80 ft.	--	--	--	--	--	--	--	--	--	--
Cemetaries within 80 ft.	--	--	--	--	--	--	--	--	--	--

* Alternates Selected

INVENTORY OF IMPACT INCIDENTS

F 191 (15) - Elmo-Rollins

F 191 (30)
Flathead County Line - So.

Primary Impacts	Alt.1 1	Alt. 2 1,2,1	Alt. 3 1,3	Alt. 4 1,4,1	Alt. 5 5,1	Alt. 6* 1,2,6, 1 As Modified	Alt.7 7,1	PTW *	HILL	PTW Modified
(6) Utilities										
water 1/ (proposed)	Dayton	Dayton	Dayton	Dayton	Dayton	Dayton	Dayton	Rollins	Rollins	Rollins
Sewer 1/ (proposed)	2 water mains 1 trunk sewer line 1-4"force main	2 water mains 1 trunk sewer line 1-4"force main	2 water mains 1 trunk sewer line 1-4"force main	2 water mains 1 trunk sewer line 1-4"force main	------ ------ ------	1 water main 1-4"force main	2 water mains 1 trunk sewer line 1-4"force main	1 water main 1-4"force sewer main	1 water main 4"force sewer main	1 water main 1-4"force sewer main
(7) Cultural Historical and Archaeological sites potentially within 80 ft.	3	2	3	0	0	3	2	0	0	0
(8) Agricultural										
Farmland Acres	---	---	---	---	20	14	---	20	35	26
Rangeland Acres	87	87	87	85	95	90	60	15	18	13
Forestland Acres	1	---	1	1	9	2	2	53	51	59
Orchards within 80 ft.	---	---	---	---	---	---	---	---	1	---
(9) Stream Crossing										
Perennial	1E	1E	1E	1E	2N	2N	1E	1N	1N	1N
Intermittent	4N	4N	4N	4N	2N-1E	3N-1E	3E	4E	2N-2E	1N-3E
(10) Community Cohesiveness	Moderate	Moderate	Moderate	Moderate	Minimal	Minimal	Moderate	Moderate	Minimal	Moderate
(11) Underdeveloped Sub-divisions	27	26	27	27	17	29	15	-----	------	------
(12) Congestion	Severe	Severe	Severe	Severe	Minimal	Moderate	Severe	Severe	Minimal	Moderate

* Alternates Selected

INVENTORY OF IMPACT INCIDENTS

F 191 (15) - Elmo-Rollins

F 191 (30)
Flathead County Line - So.

Primary Impacts	Alt. 1 1	Alt. 2 1,2,1	Alt. 3 1,3	Alt. 4 1,4,1	Alt. 5 5,1	Alt. 6* 1,2,6, 1 As Modified	Alt. 7 7,1	PTW*	HILL	PTW Modified
(13) Noise	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal
(14) C.Y. Excavation	888,000	1,024,000	887,000	785,000	1,045,000	914,000	884,000	1,357,000	2,319,000	1,570,000
E-Existing N - New										
1/ Comprehensive Area Wide Water and Sewer Plan-State of Montana,1970, Montana Department of Planning and Economic Development										

SECONDARY IMPACTS TO LAND USE	Alt. 1 1	Alt. 2 1,2	Alt. 3 1,3	Alt. 4 1,4	Alt. 5 1,5	Alt. 6 1,6	Alt. 7 1,7	PTW	HILL	PTW Modified
(1) Land Use Activity Change	Moderate	Moderate	Moderate	Moderate	Severe	Moderate	Minimal	Minimal	Severe	Moderate
(2) Concentration-Dispersion	Moderate	Moderate	Moderate	Moderate	Minimal	Moderate	Severe	Moderate	Minimal	Severe
(3) Dwelling Unit Density	Moderate	Moderate	Moderate	Moderate	Minimal	Minimal	Severe	Moderate	Minimal	Moderate

*Alternates Selected

ALTERNATE ALIGNMENT	LENGTH (miles)	CONSTRUCTION COST	RIGHT-OF-WAY COST	UTILITY COST	RELOCATION COST	TOTAL COST
Alternate No. 1	5.41	2,003,200	227,000	59,000	15,600	2,304,800
" No. 2	5.39	2,155,600	246,400	66,350	15,340	2,483,690
" No. 3	5.42	2,065,450	224,550	35,750	15,340	2,341,090
" No. 4	5.44	1,940,800	268,850	59,000	40,370	2,309,020
" No. 5	6.37	2,314,150	84,230	44,700	200	2,443,280
* " No. 6 (As Modified)	5.79	2,090,400	124,800	39,250	0	2,254,450
Alternate No. 7	5.48	2,076,800	610,700	126,000	84,670	2,898,170
* P.T. W. Alternate	7.73	2,750,200	199,370	88,150	17,750	3,055,470
Modified P.T.W. Alternate	7.77	3,059,850	700,000	114,000	15,390	3,889,240
HILL Alternate	7.56	3,856,300	193,750	66,950	30,430	4,147,430

* Selected Alternates

ROUTE SELECTION CONSIDERATIONS

(1) F 191 (15) Alternates

(a) The major portion of existing residential development has occurred along the Flathead Lake Shore in the form of permanent and seasonal dwellings with the exception of the Dayton Community. Expansion of right-of-way along Alternate 7 would have a serious disrupting effect to this existing development as well as impacting the Fish and Game fishing access facility site. Disruption would also occur to presently undeveloped subdivisions located along the existing U. S. 93 alignment.

(b) Alternates 1, 2, 3 and 4 aside from invading the previously described undeveloped subdivisions located just south of Dayton would have negative impacts to the community cohesiveness of Dayton and its elementary school environment.

(c) Although skirting lake shore development, the community of Dayton and present subdivided areas, Alternate 5, entails a longer more visual alignment and infringes upon several acres of subirrigated farmland. Wildlife habitat may be more disrupted by the Alternate 5 alignment not only in terms of construction activity, increased traffic, noise and to some degree exhaust pollution, but also increased accessibility to a presently little disturbed mountain lake area (Black Lake). Changes to the community land use pattern would also tend to be more drastic as a result of Alternate 5 with respect to the potential shifting of retail and service facilities to the new alignment.

(d) The Selected Alternate, Alternate 6 as modified, although encroaching on presently subdivided but yet undeveloped land, will bypass existing lake shore development, will not interfere with the community cohesiveness of Dayton, will infringe upon considerably less subirrigated farmland than

Alternate 5, will have less of an impact on existing Dayton retail facilities and potentially will have less of a changing influence on the existing community land use pattern of Dayton.

Alternate 6 would have crossed and required taking some Indian Trust Land. Therefore, the selected alignment was shifted to the east, toward Dayton, to avoid crossing this land.

(2) F 191 (30) Alternates

(a) Expansion of the P.T.W. Alternate right-of-way will require removal of the least number of residential structures but could potentially affect, in terms of degradation of the recreation environmental quality, the largest number of permanent and seasonal residences. Shifts in the F191 (30) project area land use patterns will be less likely take place since existing development is oriented to the Flathead Lake shore particularly in the Rollins Area. Through right of way expansion, the most severe impacts of the three alternates could require removal of two retail and two cabin establishments. Agricultural land areas affected by the alignment involve the least amount of improved farmland, an average amount of rangeland, and almost the minimum requirement of forestland in comparison to the other two alternates. Stream crossings for the most part are equal in all the F191 (30) project alignments.

(b) The Hill Alternate, although skirting a major portion of existing residential and commercial developments could conceivably require relocation or removal of five residences, the highest number of the three proposed alignments. Should unlimited accessibility be allowed along the alignment, the highway facility would have the greatest effect and changing influence of the land use pattern relative to the other two alternates. Agricultural land consumption is greatest with

the Hill Alternate in reference to farm and rangeland but utilizes the least amount of forestland.

(c) The alignment of the modified P.T.W. primarily follows the existing U.S. 93 alignment diverging at Rollins and at Table Bay. The modified version of the P.T.W., although encompassing slightly less residential structures within 1000 feet then the P.T.W. Alternate, would possibly require relocation of as many structures as the Hill Alternate. The modified alternate would have less of an impact on existing commercial development than the P.T.W. and would have less influence relative to change in the existing land use pattern with with exception of the Table Bay Area than the Hill Alternate. Infringement on agricultural lands would be moderate in terms of farmland, minimal relative to rangeland and severe with respect to forestland.

V. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY.

The short-term uses of the environment for the two projects will consist of disruption of the area and traffic flow during the construction process, the taking of both forest and grass land for right-of-way, and the relocation of several homes and businesses.

The disruption caused by the construction process will be short-lived and last only as long as construction is in progress. Traffic flow will be greatly improved through the area by the projects when they are complete. The traffic in the project vicinity will not be seriously affected, although there may be some slight changes.

The major long term effect will be the provision of a safe and efficient transportation facility to serve the traveling public.

Several of the alternates considered (including the selected alignment) would have an affect on some of the subdivisions in the area as the new highway could act more or less as a barrier and limit expansion in that direction.

The overall effects on water, air, wildlife, etc., will be minimal.

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The major resources irretrievably committed to this project will be money, labor, and road and bridge building material. The possibility exists that some of the road and bridge materials could be salvaged and re-used if conditions warranted such action.

The land that will be needed for right-of-way will not be available for other use unless a demand greater than the roadway requires a change in land use. Some of the land needed for right-of-way is presently used for agricultural purposes, however, the amount that will be taken out of production is insignificant.

The commitment of social and cultural resources will be insignificant.

There does not appear to be any major irreversible commitment of resources that would significantly affect the environment in the area of the project. Therefore, the use of the land, money, materials, etc., is considered to be justified as it will provide a much needed highway facility to serve the traveling public.

VII. COORDINATION WITH OTHERS

The following correspondence documents consultation and coordination with other agencies and organizations during the development of this project.

FORREST H. ANDERSON

MONTANA HIGHWAY COMMISSION

HELENA, MONTANA 59601

May 9, 1972

H. J. ANDERSON
DIRECTOR OF HIGHWAYS

IN REPLY REFER TO

32-GOP
F-191(15)
Elmo - Rollins
F-191(30)
Flathead County
Line South

(Sent to Attached List)

The two subject projects will involve the reconstruction of about 13 miles of U.S. Highway 93 between Polson and Kalispell. The existing highway is in very poor condition with a narrow roadway, numerous bad curves and poor sight distance. This stretch of highway is the only section of U.S. 93 between Polson and Kalispell that has not been rebuilt since the early 30's.

These two projects are now in the reconnaissance stage and a number of alternate alignments have been selected that we plan to include in our location studies. Attached is an aerial photo print that indicates each of the alternates. Also, we are planning on preparing reconnaissance contour mapping for each of the alternates in the very near future.

Our current plans in regard to the environmental issue are to prepare an environmental statement that will cover both of these projects. Therefore, our main purpose in writing to you at this time is to ask

(Cont'd)

that you provide us with any information you might have relating to environmental matters that might pertain to this area. We will appreciate any information that you might provide and will try and utilize it in our environmental statement.

Also, we will appreciate any comments that you might have in regard to anything planned for the area or anything presently existing that might affect or help us in our location studies. Any views or opinions either for or against any particular alternates will also be appreciated.

The following list indicates those agencies to which this letter is being sent. If you are aware of other agencies or groups that might be affected or concerned and are not on the list, please let us know and we will contact them.

Director, Department of Natural Resources
and Conservation
Attention: Lawrence M. Jakub
Sam W. Mitchell Building
Helena, Montana 59601

Fletcher E. Newby, Executive Director
Environmental Quality Council
Capitol Station
Helena, Montana 59601

Department of Health, Education & Welfare
9017 Federal Office Building
19th and Stout Street
Denver, Colorado 80202

Federal Water Quality Administration
Northwest Region
Room 501, Pittock Block
Portland, Oregon 95205

U.S. Department of Transportation
Federal Highway Administration
Helena, Montana 59601

(Cont'd)

Director
Montana Fish and Game Department
Sam W. Mitchell Building
Helena, Montana 59601

Agricultural Stabilization and Research
Services
112 West 13th Avenue
Helena, Montana 59601

Director
State Department of Health
Helena, Montana 59601

Department of Planning & Economic
Development
Capitol Post Office
Helena, Montana 59601

Dr. T.C. Byerly
Office of Secretary of Agriculture
Washington, D.C. 98109

Board of County Commissioners
Lake County Courthouse
Polson, Montana 59860

Board of County Commissioners
Flathead County Courthouse
Kalispell, Montana 59901

Soil Conservation Service
51 North Main
Kalispell, Montana 59901

U.S. Forest Service
200 East Broadway
Missoula, Montana 59801

Mr. Ole Ueland, Executive Secretary
State Soil Conservation Committee
Capitol Station
Helena, Montana 59601

(Cont'd)

Postmaster
Rollins, Montana 59931

Postmaster
Elmo, Montana 59915

Postmaster
Dayton, Montana 59914

Environmental Protection Agency
Denver Federal Center
Denver, Colorado 80225

Mayor
City of Polson
Polson, Montana 59860

Mayor
City of Kalispell
Kalispell, Montana 59901

Very truly yours,

H.J. ANDERSON
DIRECTOR OF HIGHWAYS

BY Grover O. Powers
Grover O. Powers, P.E.,
Supervisor - Preconstruction
Section

32-GOP:SCK:GLL:jj

Enclosure
Internal Distribution:

cc: J.R. Beckert
R.E. Champion
J.J. Keithley
V.C. Kologi
D.D. Anderson
I.B. Jensen

RECEIVED
MAY 22 1972
HELENA, MONTANA

State of Montana

State Department of Health

and Environmental Sciences
HELENA, MONTANA 59601

JOHN S. ANDERSON, M.D.
Director

May 19, 1972

Mr. H. J. Anderson
Director of Highways
Montana Highway Commission
Helena, Montana 59601

Re: F-191 (15)
Elmo-Rollins
F-191 (30)
Flathead County Line South

Dear Sir:

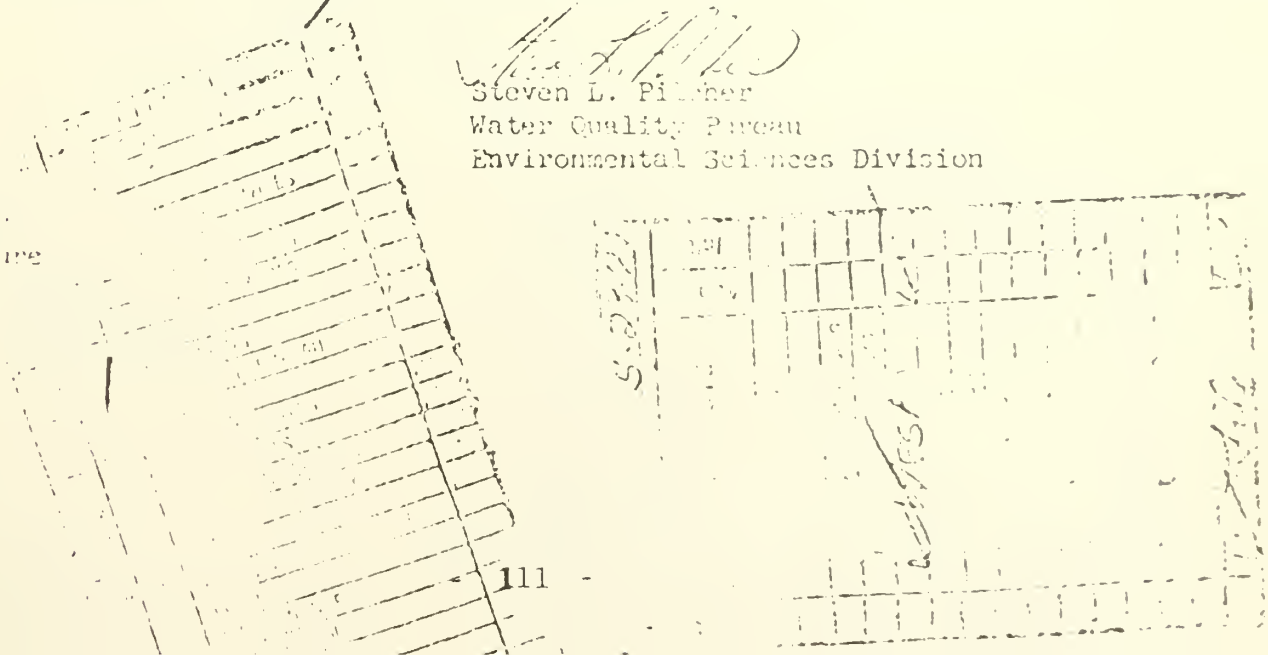
Our office has received and reviewed the preliminary information submitted in conjunction with an environmental evaluation of the above referenced proposed projects. Due to the proximity of this proposed construction activity to Flathead Lake and usage which this body of water receives, it is extremely important that erosion on the site be controlled in such a manner as to prevent water pollution.

Enclosed you will find one copy of Guidelines for Road Construction and Maintenance to Prevent Water Pollution. These recommendations have generally been followed in past projects, but we feel extra precautions are warranted here.

Very truly yours,

Steven L. Pilcher
Water Quality Bureau
Environmental Sciences Division

SLP:
Enclosure



Dir Gorrell

THE CONFEDERATED SALISH AND KOOTENAI TRIBES OF THE FLATHEAD RESERVATION

(406) 246-3595

DIXON, MONTANA 59831

Harold W. Mitchell Jr. Chairman
E. W. Morigeau Vice Chairman
F. Houle, Jr. Secretary
Ruby M. Christopher, Treasurer
Homer Courville, Sergeant at Arms

TRIBAL COUNCIL MEMBERS
William J. Ely, Jr.
Patrick H. Lefthand
Robert A. McCrea
John E. Malatare
Harold W. Mitchell, Jr.
E. W. Morigeau
Thomas E. Pablo
Victor L. Stinger
Thomas (Bearhead) Swaney
Fred Whitworth

April 17, 1975

Pl

Paul R. De Vine
Planning and Research Bureau
Department of Highways
Helena, Montana 59601

Dear Mr. De Vine,

The Confederated Salish and Kootenai Tribes have a suggestion for the new proposed highway project F 191 (15). It is our suggestion that you use alternate 3. The reason for this suggestion is that Tribal lands and alloted lands are very limited. The value of these lands whether it is marginal or sub-marginal is treasured. So, therefore, we must ask that you avoid all trust lands if possible.

In your future planning of roads we suggest that you try to avoid any and all trust lands. If you have any questions, please contact this office.

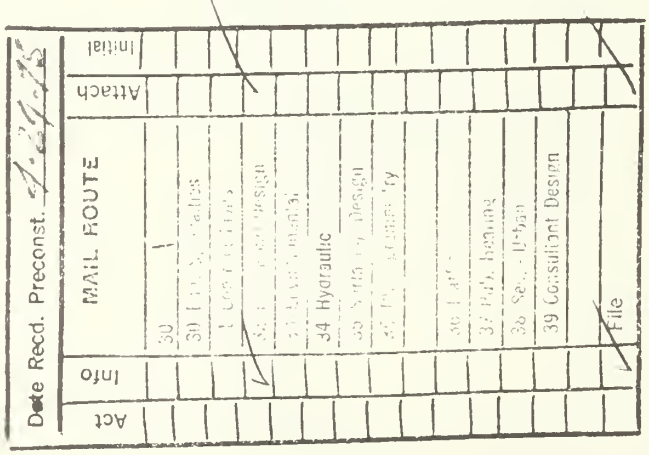
Sincerely,

CONFEDERATED SALISH & KOOTENAI TRIBES

Camille E. Matt

Camille E. Matt
Tribal Realty Specialist

CM/jo
04-17-75



STATE OF MONTANA

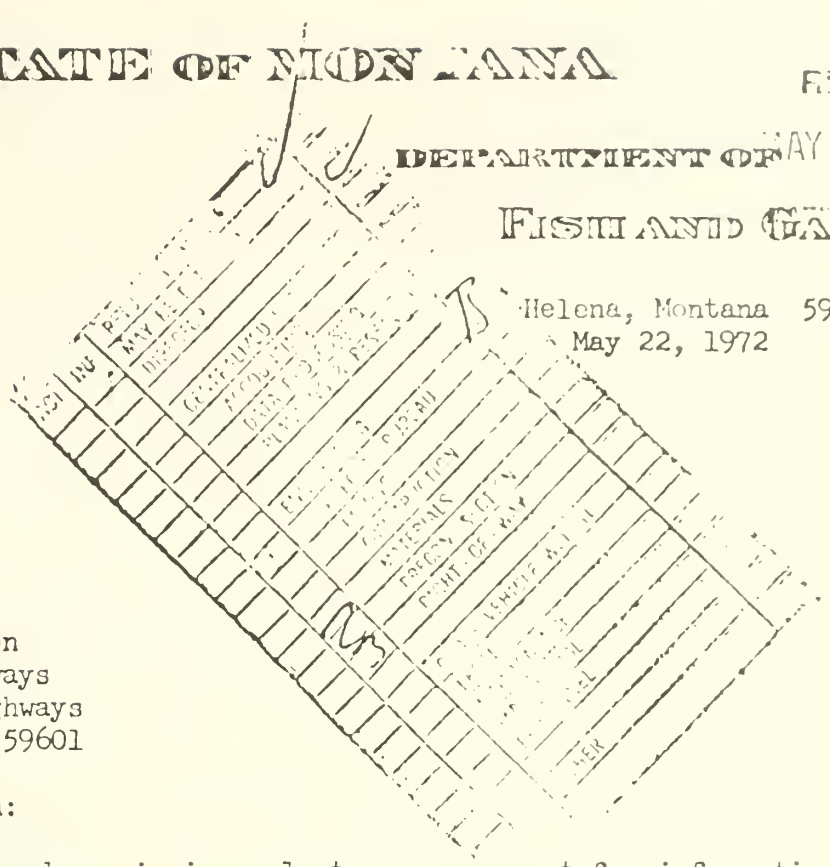
RECD.

DEPARTMENT OF MAY 26 1972

FISH AND GAME

Helena, Montana 59601
May 22, 1972





Mr. H. J. Anderson
Director of Highways
Department of Highways
Helena, Montana 59601

Dear Mr. Anderson:

This correspondence is in reply to your request for information concerning the Elmo-Rollins and Flathead County Line-South projects. This department owns one land parcel of 3.4 acres in size which is presently undeveloped. The location of this is T 24N, R 21W, Sec. 16. The name of the area is Juniper Beach.

We do not plan to develop this site in the foreseeable future. We do, however, wish to insure that legal access into the area is provided. If there is encroachment on the area we would like to be advised.

Concerning the environmental issues of the proposed alignment and alternates, we don't at this time see any specific problems. There may be some special question about alternates 6 and 5 in the Dayton area as far as use by wildlife is concerned. Other than that, only normal effects on the environment would be anticipated.

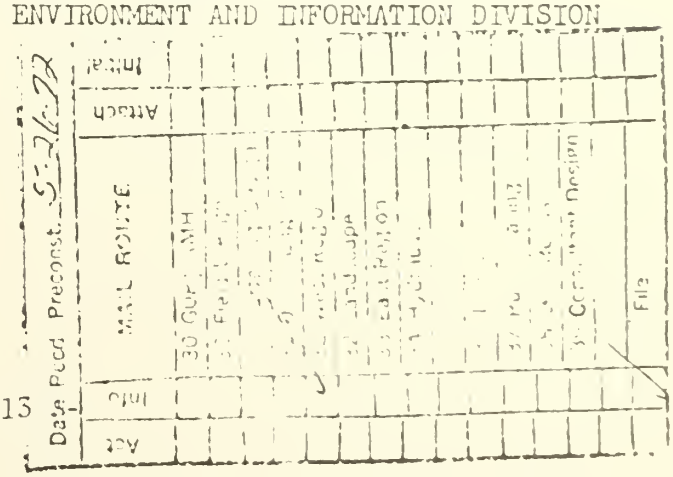
Sincerely,

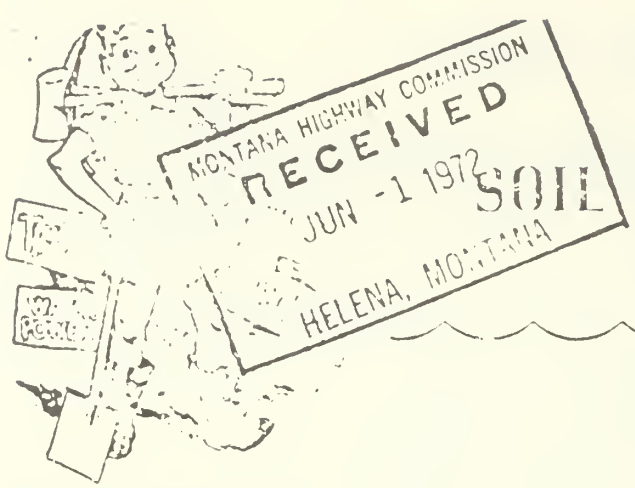
Ralph W. Boland

RALPH W. BOLAND, ASSISTANT CHIEF
ENVIRONMENT AND INFORMATION DIVISION

RWB/sd

cc: Joe Egan
Wes Woodgerd
Otis Robbins

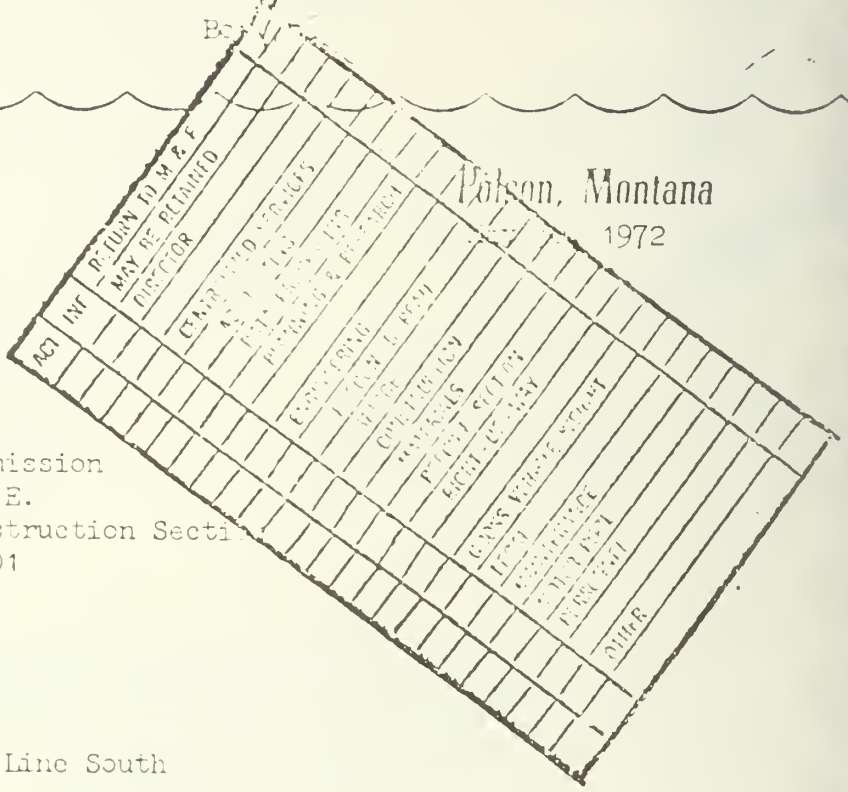




Lake County

SOIL CONSERVATION DISTRICT

Polson, Montana
1972



Copyright 1951 Green Mtn. Soil Cons. Dist

Montana Highway Commission
Grover O. Powers, P.E.
Supervisor - Preconstruction Secti
Helena, Montana 59601

Re: 32-GOP
F-191(15)
Elmo-Rollins
F-191(30)
Flathead County Line South

Dear Mr. Powers:

In reply to your letter of May 9, requesting information on the above project, this conservation district has the following comments.

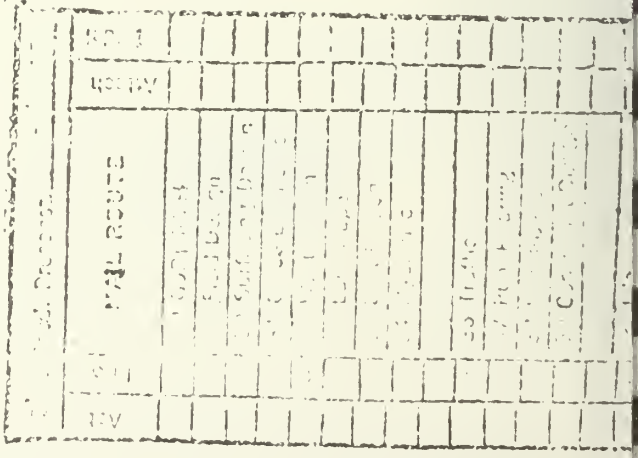
We would prefer the routing of Alternate #5, to relieve the congestion of traffic along the lakeshore, and the Hill Alternate for substantially the same reason.

We hope the highway would be constructed with fill and cut slopes which would be adaptable to normal methods of re-vegetation.

Sincerely,

Charles Russell, Chairman

cc: O.M. Reland



MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

FORREST H. ANDERSON GOVERNOR
GARY WICKS, DIRECTOR

MEMBERS OF THE BOARD
JOSEPH B. REBER, CHAIRMAN
JOSEPH W. SABOL
DEAN HANSON
RILEY OSTBY
HERBERT HUENNEKENS

449-3712
SAM W. MITCHELL BUILDING
HELENA, MONTANA 59601

June 2, 1972

Mr. Grover O. Powers, P.E.
Supervisor - Preconstruction Section
Montana Highway Department
Helena, Montana 59601

Dear Mr. Powers:

We have reviewed the information you sent to this Department concerning the proposed reconstruction of about 13 miles of U.S. Highway 93 between Polson and Kalispell.

Three separate parcels of classified State forest land could be affected in some degree by the proposed reconstruction and realignment.

A small timber sale is planned for the NW¼ Sec. 20 T25N-R20W and our Division of Forestry is presently in the process of seeking access. We note with interest that the hill alternative route appears to touch the SE corner of this ¼ section and may provide possible management access to this parcel. As soon as an alternative has been selected for this area we would like to request that our Division of Forestry be notified so that the most beneficial access route can be obtained.

The Division of Forestry has done considerable thinning in Section 8 T25N-R20W. It appears that the proposed road location in this area will not affect this section unless the present access is restricted.

Restriction of any access to the S½ of Section 16 T25N-R20W would also be of concern to our Division of Forestry.

Sincerely,

Lawrence M. Jakub

Lawrence M. Jakub
Assistant for Environmental
and Legal Affairs

LMJ:ns
cc: Gary Wicks
Gary Moon

PRINTED ON 100% RECLAIMED ECOLOGY BOND

FLATHEAD LAKERS, INC.

A NON-PROFIT CORPORATION
OF FLATHEAD LAKE RESIDENTS

MONTANA HIGHWAY COMMISSION
RECEIVED
JUN - 8 1972
HELENA, MONTANA



P. O. Box 314 ··· POLSON, MONTANA — 59860

June 8, 1972

Grover O. Powers
Supervisor - Preconstruction Section
Montana Highway Commission
Helena Montana

Dear Mr. Powers:

Reference your letter of May 24 regarding a request for comment on the proposed alternates on the section of highway U.S. 93 between Polson and Kalispell I have consulted with members who live in that area.

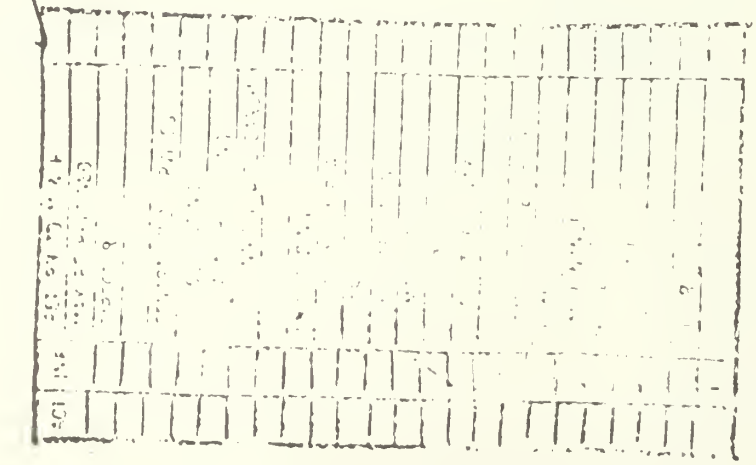
It is a little difficult to give much constructive comments without your environmental impact study, especially covering soil structure. We are in agreement that an attempt be made to avoid large side hill cuts that show up such as those you can see clear across the lake on the East Shore.

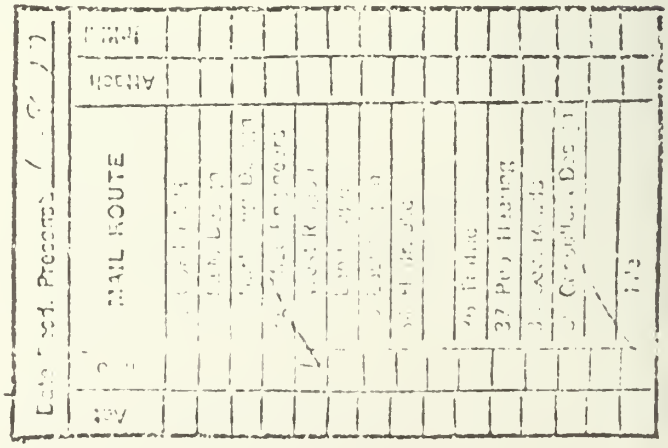
Also that any area directly adjacent to the shore be avoided due to the wash and silt problem arising from such construction that creates a new shore surface. It is quite simple to see the result of such erosion problems in places like the new Marina at Polson.

This much may not be of to much help but it is the best we can do with the information.

Sincerely,

Bourke Mac Donald
President





UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
P. O. Box 970, Bozeman, Montana 59715

June 8, 1972

H. J. Anderson, Director of Highways
Montana Highway Commission
Helena, Montana

Dear Mr. Anderson;

This letter is in reply to your reference 32-GOP Elmo - Rollins, F-191 (30), Flathead County Line South.

Your request for information relative to environmental impact of proposal highway routes was referred to the Lake County Conservation District supervisors for review. Following are their comments:

" For project F 191 -(15) preferance was for ALT-5. This would keep traffic away from lakeshore and afford an elevated view of Wildhorse Island, Mission Mountains, and the lake itself. One problem will exist west of Dayton where the proposed route will run along side and parallel to a sprinkler irrigation mainline. It is believed that a satisfactory relocation of the mainline could be worked out. A right of way relocation might also be considered here. Also would recommend overpass and underpass where this route would interest proposed new road to Lake Mary Ronan (FAS. 352).

On project F 191 (30) the supervisors recommend the Hill ALT. route. This would but diagonally across some pasture land but it is thought the long term advantages would outweigh the disadvantages.

It is further recommended that controlled access be established where main feeder roads join the proposed routes.

It is also recommended that adequate underpasses be provided for livestock movement. These need only be arch culverts of sufficient size (7 ft.). Also suggested is that side slopes be kept as close to 3-1 as possible so that revegetation could be carried out with a good chance of success.

Above choice of alternate routes would appear to least damage the environment and at the same time result in an acceptable traffic route.

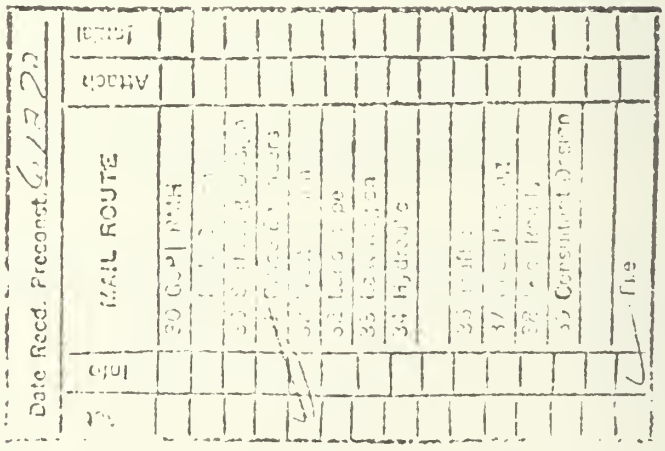
When complete this road system will experience about the same concentration of traffic as does Interstate 90 through the Missoula Area."

We hope that these observations of local residents will be helpful to you in preparing your environmental impact statement.

Sincerely,

A. B. Linford
State Conservationist

cc: Dr. T. C. Byerly, Washington, D.C.
William B. Davey, SCS, Washington, D.C.



UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Region 1, Missoula, Montana 59801

REPLY TO: 7720 [illegible] System

August 3, 1972

SUBJECT: U.S. 93 - Elmo to Flathead County Line

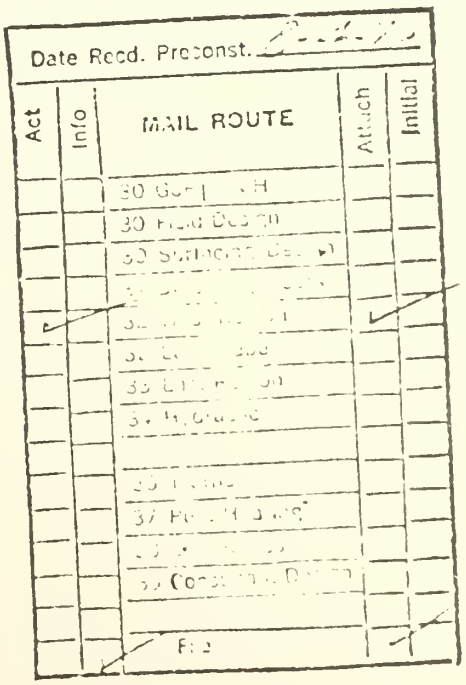
TO: H.J. Anderson, Director of Highways
Department of Highways
6th Avenue & Roberts
Helena, Montana 59601

We have reviewed the various tentative locations of Elmo-Rollins and Flathead County line south projects on U.S. Highway 93. Both sections are in need of reconstruction.

From an environmental aspect, the final route selection should consider the effects the road will have on the view from Flathead Lake.

None of the proposed routes encroach on any known areas specially designated under Section 4(f) of the Department of Transportation Act of 1966.

LELAND C. LANDMAN
Acting Division Chief
Division of Engineering



Department of Health and Environmental Sciences
STATE OF MONTANA HELENA, MONTANA 59601

John S. Anderson M.D.
DIRECTOR

December 10, 1974

Stephen C. Kologi, P.E.
Chief, Preconstruction Bureau
Department of Highways
Sixth and Roberts Streets
Helena, MT 59601

Re: F-191(15) - Elmo-Rollins
F-191(30) - Flathead Co. Line-South

Dear Mr. Kologi:

We have reviewed the plans of the referenced project and find there should be no adverse effects on air quality from the construction of this project. We know of nothing existing or planned that would adversely effect the project in air quality considerations. We assume that the usual precautions will be taken during construction to protect the environment from excessive dust and that any clearing and grubbing will be done according to current specifications.

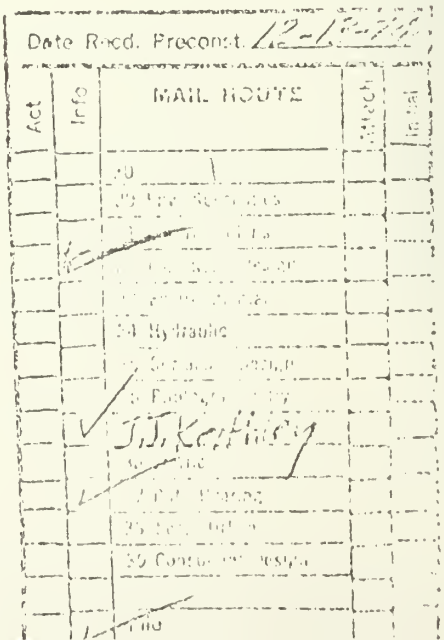
If we can be of further help please contact us.

Sincerely,

R. Clark Neilson

R. Clark Neilson
Air Pollution Control Specialist
Air Quality Bureau

RCN:dmg



Dick Howe

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

P. O. Box 970, Bozeman, MT 59715

March 11, 1974

Paul R. DeVine, Chief
Planning and Research Bureau
Montana Department of Highways
Helena, Montana 59601

Dear Mr. DeVine:

This is in reply to your letter dated March 6, 1974, regarding the availability of soil surveys for an area on the west side of Flathead Lake. Specifically, the area you identified is from Elmo north to the Lake-Flathead County line.

At present we don't have soil surveys covering this area. However, we will be happy to make a soil survey of this area and to provide you with the interpretations you ask for.

We will plan to have the information available to you by about June 15, 1974.

We are pleased to have the opportunity to assist you in your highway planning program.

Sincerely,

A. B. Linford

A. B. Linford
State Conservationist

March 7, 1974

0026:PRD

Mr. Sam Gilluly, Director
Montana Historical Society
225 North Roberts
Helena, Montana 59601

Dear Mr. Gilluly:

The Montana Department of Highways is presently considering improvement of U.S. 93 in a corridor area from Elmo North to the Lake-Flathead County Line. (See attached map) Several alternative route locations have been selected through the U.S. 93 corridor area. Each of these alternative route locations are to be analyzed in light of environmental, social, economic and land use impacts to the Flathead Lake West Shore Area. Forthcoming from the alternative route analysis will be a draft Environmental Impact Statement for public and government agency review.

Local data inputs needed for alternative route analysis include location of historical sites, local history and knowledge of any restoration plans.

Any consideration or assistance your department could give us in obtaining this information would be most appreciated.

Very truly yours,

H.J. ANDERSON
Director of Highways

By_____
Paul R. DeVine, Chief
Planning and Research Bureau

PRD:RH:dv
Enclosure

(No Reply Received)

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

March 5, 1974

IN REPLY REFER TO
0026:PRD

Mr. Ashley C. Roberts, Administrator
Recreation and Parks
Department of Fish and Game
Sam W. Mitchell Building
Helena, Montana 59601

Dear Mr. Roberts:

The Montana Department of Highways is presently considering improvement of U.S. 93 in Lake County, Montana. These improvements will take place within a corridor area from the community of Elmo north to the Lake-Flathead County Line. (Refer to attached map) Several alternative route locations have been selected through the U.S. 93 corridor area by our Engineering Division. Each of these alternative route locations are to be analyzed relative to environmental, social, economic, and land use impacts to the Flathead Lake West Shore Area. Forthcoming from the alternative route analysis will be a draft environmental impact statement for public and government agency review.

Since the Fish and Game Department has park and fishing access facilities within the project area we would like to obtain any information relative to the exact location of existing facilities, expansion plans of existing facilities or proposed plans of future park and access areas.

Other project area data needed includes wildlife characteristics relative to species present, migration routes, range locations and possible areas of extreme vehicular-wildlife conflicts.

Any consideration or assistance given in helping us to obtain this information would be most appreciated.

Very truly yours,

H.J. ANDERSON
Director of Highways

By_____
Paul R. DeVine, Chief
Planning and Research Bureau

(Reply Received)

PRD:RD:cv
Enclosure

STATE OF MONTANA

DEPARTMENT OF

FISH AND GAME

Helena, Montana
January 22, 1974

Re: F 191(15) Elmo-Rollins
F 191(30) Flathead County
Line South

Mr. Stephen C. Kologi, P.E.,
Supervisor-Preconstruction Section
Department of Highways
Capitol Post Office
Helena, Montana 59601

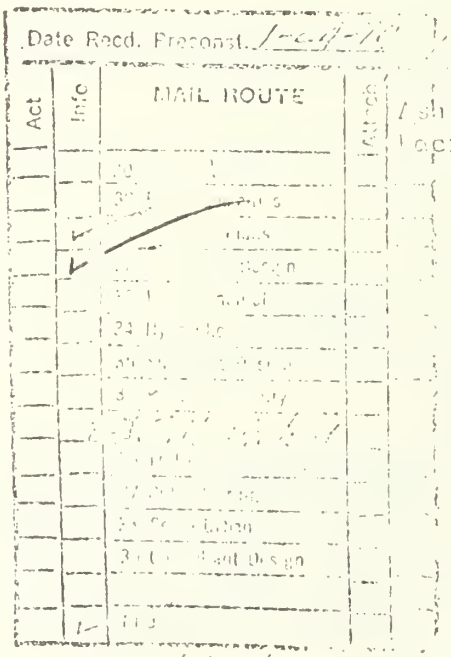
Dear Mr. Kologi:

We know of no trespass on any Fish and Game Department lands pertinent to this project, although th alternates start at Elmo and end at West Shore state parks. t also goes by our Juniper Bay site. We have looked at the historic potential and see no conflicts as far as the alignments are concerned. The only information on Dayton Creek is available at the University of Montana.

Sincerely,

Ashley C. Roberts, Administrator
Recreation and Parks Division

ACR:sd



STATE OF MONTANA

Dick Howell

DEPARTMENT OF

FISH AND GAME

Helena, Montana
March 20, 1974

Mr. Paul R. DeVine, Chief
Planning and Research Bureau
Department of Highways
Capitol Post Office
Helena, Montana 59601

Re: 0026:PRD, and
F191(15) Elmo-Rollins
F191(30) Flathead County
Line South

Dear Mr. DeVine:

Thank you for your letter requesting information on historic sites in the vicinity of highway U. S. 93 on the west shore of Flathead Lake.

Ash Roberts, Administrator of our Recreation and Parks Division, replied on January 22 to Mr. Stephen Kologi of your Preconstruction Section regarding the impacts of the alternative routes on recreation and historic sites. We have also transmitted much of this information to Dick Howell of your bureau. However, below I will summarize our present knowledge of historic sites within and near your project area.

Mr. Kologi, in his letter of January 11, mentioned "some type of archeological site near the mouth of Dayton Creek where numerous artifacts have been found." This was the first we knew of this site, and any information about it or other possible archeologic sites in the area would have to be obtained from the Statewide Archeological Survey at the University of Montana in Missoula. We mentioned the pictographs at Painted Rocks to Dick Howell. They are located in Section 22, T25N-R20W and are apparently on private land and accessible only by lake.

The only site that is listed in the state Historic Preservation Plan that is anywhere near the project area is the Frank Linderman House (a famous author) which is south of Lakeside in Flathead County. There may, of course, be several archeologic sites in the area unknown to us, but the Statewide Archeological Survey would have that kind of information.

March 20, 1974

If we can be of any further assistance in this matter, do not hesitate to contact Ash Roberts or me.

Sincerely,

Wes Woodgerd

Wesley R. Woodgerd
Director

WRW:ACR:op

STATE OF MONTANA

DEPARTMENT OF FISH AND GAME

Helena, Montana 59601
March 22, 1974

Mr. H. J. Anderson, Director of Hig[illegible]s
Montana Department of Highways
Highway Building
Helena, Montana 59601

Re: 0026:PRD

Attn: Paul R. DeVine, Chief - Planning and Re[illegible]rch

Dear Sir:

We offer the following concerning improvement of U. S. [illegible]n Lake County (Elmo-Lake/Flathead County lines).

The area on the map outlined in green pencil west of the lake [illegible]xtending from the Flathead-Lake County line to the Flathead Indian Reserva[illegible] line north of Dayton encompasses most all of the winter range for white-[illegible]d deer, a few small elk bands, and a small population of mule deer.

If the area from the present road (outlined in red) and the green boundary is the area to receive the new route for Highway 93, then any new road location could bisect the winter ranges of the above species.

This has been a high risk area for deer-car collisions for a long time. The present highway loss is high compared to many are[illegible]s because it is used year-round by white-tailed deer. Any new road would also be detrimental because it would no doubt be a higher speed road than the existing highway. Any change in road location could also eliminate ground presently producing forage for game, especially white-tailed deer.

Deer have been killed on the highway from the hill north of Dayton to the Flathead County line. No one place appears to be worse than others; the only places they are not killed is within the deep cuts which make crossing impossible. Few deer, if any, are killed from Dayton to Elmo on the reservation because of the lack of timber along the road.

Sincerely,

WESLEY R. WOODGERD
STATE FISH AND GAME DIRECTOR

Wynn G. Freeman by Egan

By: Wynn G. Freeman, Administrator
Game Management Division

WGF:mm
Enc. Map
cc: Region 1 Office

Dick Howell

DEPARTMENT OF ANTHROPOLOGY

University of Montana
Missoula, Montana 59801
(406) 243-0211

April 2, 1974

Paul R. DeVine Chief
Planning and Research Bureau
State of Montana
Department of Highways
Helena, Montana 59601

Re: 0026:PRD

Dear Sir;

In reply to your letter of 19 March concerning the improvement of US Highway 93, I am enclosing a list of sites on or near the present highway right of way.

Aside from these specific sites, informants in our department indicate that this area is a site rich area, and it is likely that there are many sites as yet unrecorded. Improvement of the highway in this area may indeed endanger either known or as yet unknown sites.

Sincerely yours,

Floyd W. Sharrock
Director
Statewide Archaeological Survey

FWS:drcc
Enclosure

24LA11	Burial near Dayton
24LA12	Burial near Rollins
24LA1001	Occupation site: Mouth of Dayton Creek
24LA1002	Occupation site: 1/2 mile upstream on Dayton Creek
24LA1003	Occupation site: 1 mile upstream on Dayton Creek
24LA1004	Burials Between Elmo and Dayton
24LA1005	Burial near Dayton
24LA1006	Pictographs between Rollins & Dayton
24LA1007	Rock shelters near 24LA1006
24LA1008	Occupation site at Elmo
24LA1011	Vision guest structure on Chief Cliff
24LA1012	Rock alignment 2 miles Northwest of Elmo
24LA1013	Pictographs at Base of Chief Cliff
24LA1015	Battle pits North of Elmo
24LA1016	Battle pits North of Elmo
24LA1026	Pictographs, Painted Rocks north of Rollins

Other sites undoubtedly exist in this area although they have yet to be recorded.

THE CONFEDERATED SALISH AND KOOTENAI TRIBES
OF THE FLATHEAD RESERVATION

DIXON, MONTANA 59831

Harold W. Mitchell, Jr., Chairman
E. W. Morigeau, Vice Chairman
P. J. Hoyle, Jr., Secretary
Ruby M. Christopher, Treasurer
A. Henry Burland, Sergeant at Arms

May 9, 1974

TRIBAL COUNCIL MEMBERS
Patrick D. Lefthand
Robert A. McCrea
Joseph F. McDonald
John E. Melatare
Harold W. Mitchell, Jr.
E. W. Morigeau
Thomas E. Pablo
Victor L. Stinger
Thomas (Bearhead) Sweney
Fred Whitworth

Mr. Paul R. DeVine
Planning & Research Bureau
Department of Highways
Helena, Montana 59601

Dear Mr. DeVine:

The Tribes have no plans for or any of the proposed routes for highway 93, to the Flathead County line. In the event that one of the routes does cross tribal land. I'm sure a right-of-way can be negotiated.

It is possible that one of the routes may cross several unmarked graves in the area, as this has been some of the land occupied by the Kootenai people. We would like to see your plan take into account and recommended a way to remove all graves discovered.

If you have any questions, please contact the Tribal Office.

Sincerely yours,

CONFEDERATED SALISH & KOOTENAI TRIBES

Camille E. Matt

Camille E. Matt
Tribal Realty Specialist

ah

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

HELENA, MONTANA 59601
April 11, 1974

H. J. ANDERSON
DIRECTOR OF HIGHWAYS

IN REPLY REFER TO
0026:PRD

Mr. Floyd W. Sharrock, Director
Statewide Archaeological Survey
University of Montana
Missoula, Montana 59801

Dear Mr. Sharrock:

Thank you for your letter of April 2, 1974 concerning archaeological sites within the Elmo-Rollins Area. Our Engineering Division has provided the Planning and Research Bureau with an aerial map of the Elmo-Rollins project indicating proposed alignments for study. I am forwarding a copy of this map at a scale of 1" = 2000' ± in hopes that the sites indicated by your department could be more specifically located. Just mark the map up in red pencil and return to our office.

Your assistance in this matter is certainly appreciated.

Very truly yours,

H.J. ANDERSON
Director of Highways

By_____
Paul R. DeVine, Chief
Planning and Research Bureau

PRD:RH:cv
Enclosure

(Reply Received)

GEORGE VUCANOVICH, CHAIRMAN
HELENA

G. R. COONEY
BUTTE

P. L. BACHELLER
BILLINGS

JAY LA LONDE
SIDNEY

DEPARTMENT OF ANTHROPOLOGY

University of Montana
Missoula, Montana 59801
(406) 243-0211

May 10, 1974

Mr. Paul R. DeVine, Chief
Planning and Research Bureau
Montana Department of Highways
Helena, Montana 59601

Re: 0026:PRD

Dear Mr. DeVine:

Enclosed, find the aerial of the Elmo-Rollins Project with known sites located as precisely as was possible.

Sincerely yours,

Floyd W. Sharrock
Chairman,
Anthropology

FWS:sg
Enclosure

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

HELENA, MONTANA 59601

H. J. ANDERSON
DIRECTOR OF HIGHWAYS

November 26, 1976

IN REPLY REFER TO

F 191 (15)
Elmo - Pollins

Mr. Ron Holliday
State Historic Preservation Officer
Montana Department of Fish & Game
Helena, Montana 59601

Dear Mr. Holliday:

We are in the process of writing the Final Environmental Statement for the subject highway reconstruction project. It appears the route we have selected may affect three known archaeological sites identified by Mr. Floyd W. Sharrock, Director of the Statewide Archaeological Survey as site Nos. 24LA1002, 24LA1004 and 24LA1005. Please refer to the enclosed letter and photograph.

Using the Federal Register (Friday, January 25, 1974) guidelines it is our opinion that these would probably not be considered eligible for nomination to National Register of Historic Places. We request your review and concurrence in this matter so we may adequately cover this subject in our Final Environmental Statement.

It is our intent to treat these sites in the approved manner as we have in the past.

Thank you for your prompt attention to this matter.

Very truly yours,

H. J. ANDERSON
DIRECTOR OF HIGHWAYS

By _____
Stephen C. Kologi, P. E., Chief
Preconstruction Bureau

32-SCK:JTW:mg
Enclosures

cc: K. F. Skoog

GEORGE [illegible], CHAIRMAN
HELENA

[illegible]
BUTTE

P. L. BACHELLER
[illegible]

BAXTER LARSON
[illegible]

Mail & Memo

STATE OF MONTANA

DEPARTMENT OF

FISH AND GAME

Helena, Montana 59601
December 30, 1976

Mr. Stephen C. Kologi, Chief
Preconstruction Bureau
Department of Highways
Helena, Montana 59601

Dear Mr. Kologi:

This is in regard to your November 26, 1976, letter regarding archaeological sites which may be involved in project F 191 (15), Elmo - Rollins.

The particular area of this project is an extremely rich archaeological region. It was a very attractive place to live for prehistoric people. To my knowledge archaeological nos. 24LA1002, 24LA1004 and 24LA1005 have not been scientifically examined. Therefore, I do not believe there is sufficient information at this time on these sites to make this determination. Since this area is extremely rich in archaeological resources, I suggest intensive archaeological investigations be conducted by qualified professional archaeologists before the project commences.

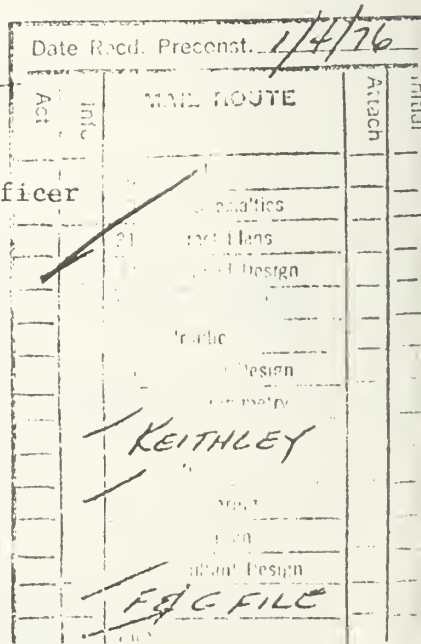
Thank you for contacting me.

Sincerely,

Ron Holliday

Ron Holliday
State Historic Preservation Officer

RH:hm



February 23, 1977

F191 (15)
Elmo-Rollins

Mr. Ken Korte
State Historical Preservation Officer
State Historical Society
225 North Roberts
Helena, Montana 59601

Dear Mr. Korte:

We are in the process of writing the Final Environmental Impact Statement on the subject highway reconstruction project. The route we have selected may affect three known archaeological sites identified by Mr. Floyd W. Sharrock, Director of the Statewide Archaeological Survey as site Nos. 24LA 1002, 24LA 1004, and 24LA 1005. Please refer to the enclosed letter.

We must have a determination from you, as the State Historic Preservation Officer as to whether or not these three sites are considered eligible for inclusion in the National Register of Historic Places. Please provide us with this determination.

Several agencies commenting on our draft EIS, including the FHWA and the Advisory Council on Historic Preservation, requested further clarification of our procedures concerning these archeological sites. We are enclosing past correspondence concerning this matter and a preliminary copy of our Final EIS for your information.

Please advise if you need additional information. This matter has been discussed with Mr. Al Thompson of your Society.

Very truly yours,

H. J. ANDERSON
DIRECTOR OF HIGHWAYS

By
Stephen C. Kologi, P. E., Chief
Preconstruction Bureau

32-SCK:JTW:mg
Enclosures

cc: K. F. Skoog

Mail & File

MONTANA HISTORICAL SOCIETY

225 NORTH ROBERTS STREET • (406) 449-2694 • HELENA, MONTANA 59601

4/1/77

Date	Initials
March 31, 1977	
31 Transport Plans	
32 Loc. Road Design	
33 Environmental	
34 Traffic	
35 Surfacing Design	
35 Photogrammetry	Ken Korte
36 Traffic	
37 Pub. Hearing	
38 Sec. - Urban	
39 Concurrent Design	
File	

Mr. Stephen C. Kologi, Chief
Preconstruction Bureau
Department of Highways
Helena, Montana 59601

Attn: James Weaver

Re: Elmo-Rollins
F 191 (15)

Dear Mr. Kologi:

Reference is made to your request for information on the eligibility for the National Register of the following sites:

24LA1002
24LA1004
24LA1005

We have consulted with the Department of Anthropology at the University of Montana and it has been determined that the three above named sites are not eligible for the National Register of Historic Places.

While the above sites may have been of eligible status at one time, the sites have been very nearly destroyed through the removal of materials. Further, the initial work was done by amateurs, which also affected the significance of the findings.

Our concern here is with the remainder of the area in which the construction will take place. The general area in which the construction is proposed is one of high potential for archaeological sites. We understand that as your plans for the alignment are finalized your agency will be arranging for on site investigation of archaeological resources. Also, it is our understanding that actual construction may be three or four years in the future.

Thank you for contacting us.

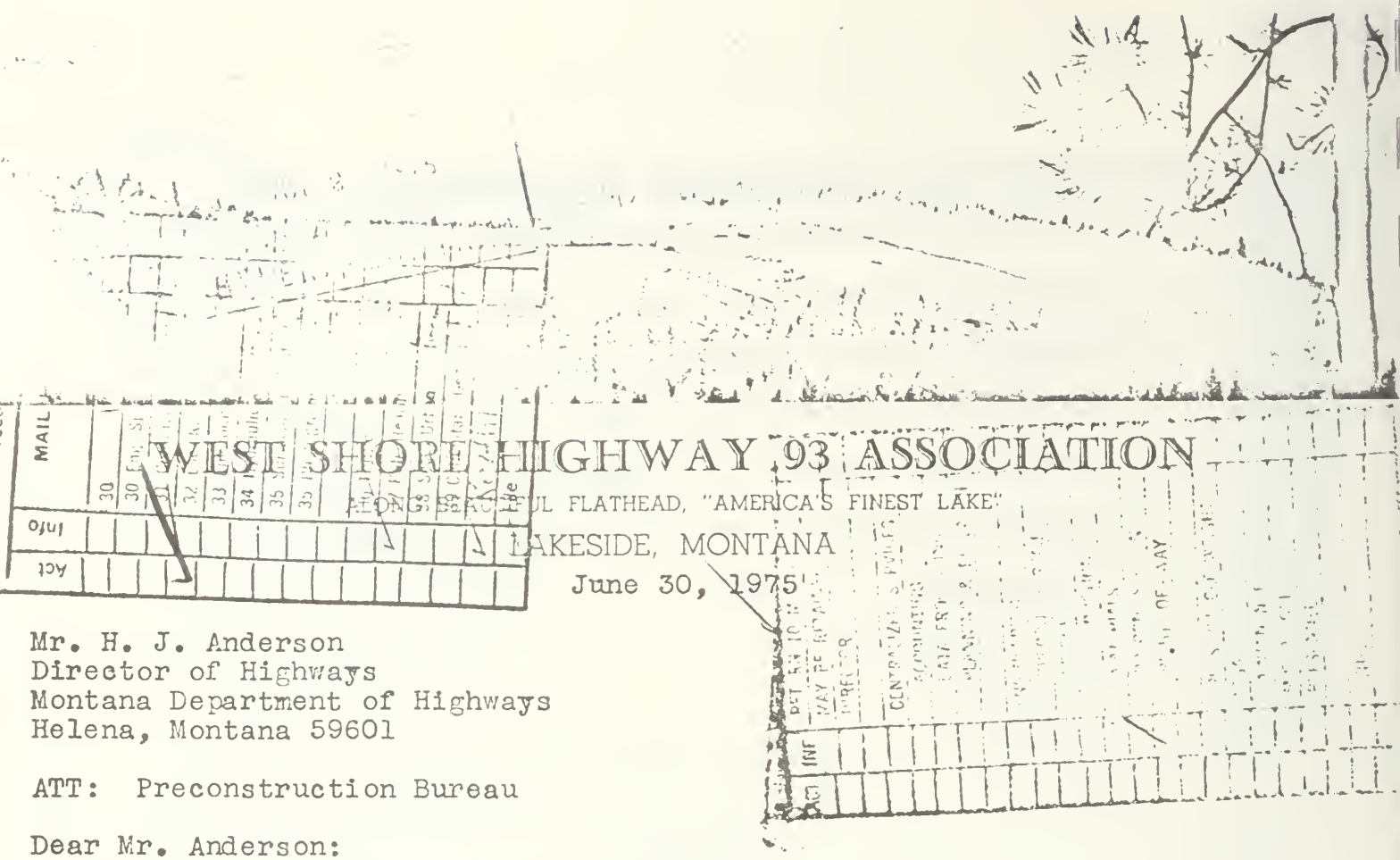
Yours truly,

Ken Korte
State Historical Preservation Officer

KK:AT:vk

VIII. COMMENTS FROM OTHER AGENCIES ON DRAFT ENVIRONMENTAL STATEMENT

Letters from other agencies containing their comments on the Draft Environmental Statement are included as a part of this Final Statement. With each letter that had a comment or question, we have attached a discussion of the comment or an explanation where a discussion of the comment can be found in this statement. There were no letters indicating that any other major environmental issues should be considered or discussed.



WEST SHORE HIGHWAY 93 ASSOCIATION

ALONG BEAUTIFUL FLATHEAD, "AMERICA'S FINEST LAKE"

LAKESIDE, MONTANA

June 30, 1975

Mr. H. J. Anderson
Director of Highways
Montana Department of Highways
Helena, Montana 59601

ATT: Preconstruction Bureau

Dear Mr. Anderson:

Careful consideration has been given to all phases included in the Draft Environmental Impact Statement. This is also based on studies that have been made of these projects in the years since 1955. In arriving at a choice of the alternate plans shown on this chart, we must have in mind the studies that have been made in the past, especially by the team of economists from the University of Montana. If their studies are available to the engineers in Helena, they should be included in the over-all consideration. When their information was made available to the public, we were counseled we should work toward a four-lane highway from the Idaho border to the Canada (B.C.) border.

Having this in mind and having been very much aware of the development of traffic, it is our belief that the routes chosen should be Alternate Plan 2 in the south section and the Modified PTW Alternate in the north section. Construction should be carried on with the thought that in the near future the highway will have to be widened to accommodate four lanes. Naturally, the right-of-way purchase will be such in every instance to permit the widening without changing of alignment.

The results of this survey will be appreciated here in Lakeside. We have the knowledge here that the highway through Lakeside is not sufficient and in a few years with the traffic increasing at the rate it does yearly we will be called upon to accept a right of way at least one mile to the west of the present roadway.

Sincerely,

Keith E. Denton
Executive Secretary

THERE'S MORE TO SEE ON SCENIC 93

P.O. Box 22

We were not aware of the study referred to. Because the title of the study and or the names of the authors were not indicated we were unable to obtain a copy of the study.

The typical section for this project includes two 12-foot driving lanes and 10-foot shoulders. This section is designed to adequately carry the projected 1999 traffic.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

REGIONAL OFFICE
FEDERAL BUILDING, 1961 STOUT STREET
DENVER, COLORADO 80202

REGION VIII

MONTANA HIGHWAY COMMISSION
RECEIVED
JUL 18 1975
HELENA, MONTANA

July 16, 1975

IN REPLY REFER TO:
8DE

Mr. Stephen C. Kologi, P.E.
Chief Preconstruction Bureau
State of Montana
Department of Highways
Helena, Montana 59601

Dear Mr. Kologi:

This is in response to the Draft EIS for Elmo-Rollins and Flathead County Line So. with cover letter dated June 18, 1975.

As you may know, this Department's primary concerns in responding to a Draft EIS are: (1) the consistency of an action with the comprehensive planning for the area; and (2) the action's impact on housing, especially in an urban area. After reviewing your EIS, we find you have adequately assessed the housing aspect. However, my we suggest you send a copy of the Draft EIS to Mr. Louis Wall, Advisory Council on Historic Preservation, P.O. Box 25085, Denver, Colorado 80225 to inform him of the possible adverse effect on archeological sites and for his comments.

Sincerely,

David L. Witt

David L. Witt
Director, Environmental Quality Division
Community Planning and Development

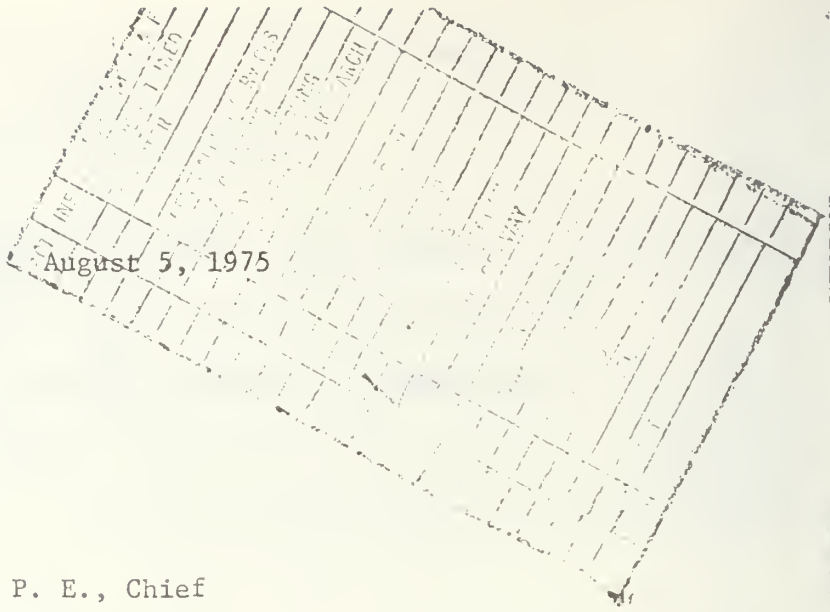
Date Recd. Preconst. 7/18

Act	Info	MAIL ROUTE	Attach	Initial
		34 Hydraulic		
		Keithley		
		Hle		

A copy of the Draft Environmental Statement was sent to Mr. Louis Wall of the Advisory Council on Historic Preservation for comment as suggested. A copy of his reply follows.

Advisory Council
On Historic Preservation
1522 K Street N.W.
Washington, D.C. 20005

MON AND HIGHWAY COMMISSION
RECEIVED
AUG 11 1975
HELENA, MONTANA



August 5, 1975

Mr. H. J. Anderson
Director of Highways
Department of Highways
State of Montana
Helena, Montana 59601

Attention: Stephen C. Kologi, P. E., Chief
Preconstruction Bureau

Dear Mr. Anderson:

This is in response to your request of July 22, 1975, for comments on the draft environmental statement (DES) for Projects F-191 (15) and F-191 (30), Elmo-Rollins and Flathead County Line South, Montana. Pursuant to Section 106 of the National Historic Preservation Act of 1966, and Sections 1(3) and 2(b) of Executive Order 11593, "Protection and Enhancement of the Cultural Environment" of May 13, 1971, the Advisory Council is charged with the responsibility of providing Federal agencies with comments on their undertakings which affect cultural resources. Until the Council has been notified by a Federal agency that it has determined an undertaking will affect a property included in or eligible for inclusion in the National Register of Historic Places, the Council is unable to comment.

The Council on Environmental Quality's guidelines for compliance with the National Environmental Policy Act of 1969 directs Federal agencies to forward copies of environmental statements prepared for undertakings which will have an impact on cultural resources to the Advisory Council for review and comment. Therefore, because the Council has no legislative or administrative authority to comment to state agencies on its undertakings or environmental statements, the following remarks are directed to the Federal Highway Administration (FHWA).

The Council notes from its review of this DES that sixteen known archeological and historical sites could be affected by various alternatives which are under consideration for this project. In addition, the Statewide Archaeological Survey, headquartered at the University of Montana, noted that this area could be expected to be rich in archeological

The Council is an independent unit of the Executive Branch of the Federal Government charged by the Act of October 15, 1966 to advise the President and Congress in the field of Historic Preservation.

sites. It therefore appears that the requirements of Section 1(3) of Executive Order 11593, "Protection and Enhancement of the Cultural Environment" of May 13, 1971, as implemented through the Council's "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800) may not have been adequately addressed by the Montana Department of Highways. Briefly, the Procedures specify that cultural resources should be identified by thorough surveys and evaluated for inclusion in the National Register of Historic Places. If cultural resources are determined eligible for inclusion in the National Register will be affected by the proposed undertaking, FHWA is required to afford the Advisory Council an opportunity to comment pursuant to the Procedures. Steps to determine eligibility and effect are detailed in Section 800.4 of the Procedures (a copy of which is enclosed for your convenience).

Because the Advisory Council is unable to assess the impact of the proposed undertaking on cultural resources which are discussed in the text of the DES, the Council must consider this DES to be inadequate. If an alternate location for this highway construction project is chosen which will affect cultural resources which are determined to be eligible for inclusion in the National Register then the FHWA should begin the compliance process detailed in Section 800.4 of the Procedures in a timely manner so that the resolution of the problem is included in the final environmental statement for this project.

In addition, the Council wishes to remind the FHWA that archeological salvage in itself is a destructive action that substantially alters the site. Therefore, before contracting to salvage an archeological site, the FHWA is required to determine the eligibility of the site for inclusion in the National Register, and if determined eligible by the Secretary of the Interior, afford the Council an opportunity to comment in accordance with the previously cited procedures.

Should you have any questions or require any additional assistance, please contact Brit Allan Storey of the Advisory Council staff at P. O. Box 25085, Denver, Colorado 80225, telephone number (303) 234-4946.

Sincerely yours,

Louis S. Wall
Assistant Director, Office
of Review and Compliance

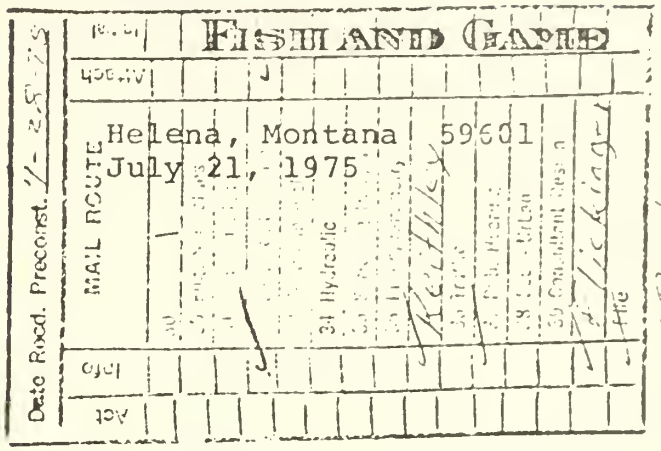
Enclosure
cc: Chairman-Clement M. Silvestro, ACHP
Lt. Gen. Benjamin O. Davis, Jr.-DOT:FLO

As discussed in Section IIA a thorough survey of the entire project area will be made by the Statewide Archaeological Survey before a contract is let. With the results of their survey it will be determined whether the sites should be preserved or salvaged. If the sites are not to be preserved the Statewide Archaeological Survey will perform any work they deem necessary.

Coordination on the matter of these archaeological sites has been and will continue to be maintained with The State Historic Preservation Officer and the Statewide Archaeological Survey.

STATE OF MONTANA

DEPARTMENT OF



Mr. H. J. Anderson
Director
Montana Department of Highways
Helena, Montana 59601

ATTENTION: Stephen C. Kologi

Dear Mr. Anderson:

RE: RS 133 (2) Havre - North Secondary Route 233
RF 164 (17) West Valley Highway, Anaconda
RF 252 (28) Loma - N & S, U.S. 87
F 191 (15)
F 191 (30) Elmo - Rawlins and Flathead County Line South

Thank you for your inquiries regarding historic sites in the vicinity of the above projects.

At this time, we see no impacts upon cultural or recreational resources from the proposed reconstruction of secondary route 233 north of Havre.

Also at this time, we see no effects on cultural or recreational resources from the proposed upgrading of U.S. Highway 10A west of Anaconda.

We are returning your two autoscreen prints and your map showing the Loma North and South highway project. We know of no historic sites within the immediate vicinity of this project and do not have any land in the area with present or planned for usage.

We have reviewed your draft environmental statement for the Elmo-Rawlins and Flathead County Line South highway projects. Although pages 51 and 59 mentioned that several archaeological sites will be affected by certain highway alternates, no mention is made of the proposed disposition of these sites. Any affected sites should be professionally excavated and a determination made as to whether any of these sites should be preserved or merely recorded prior to construction.

I hope these comments will be of help to you. Thank you for contacting me.

Sincerely,

Ashley C. Roberts

Ashley C. Roberts
State Historic Preservation Officer

ACR:DGC:jp

Section II (A) has been revised to indicate the disposition of any archaeological sites.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
REGION VIII
FEDERAL OFFICE BUILDING
19TH AND STOUT STREETS
DENVER, COLORADO 80202

OFFICE OF THE REGIONAL DIRECTOR

RECEIVED
JUL 28 1975
HELENA, MONTANA

July 23, 1975

Mr. H. J. Anderson
Director of Highways
Montana Department of Highways
Helena, Montana 59601

Attention: Preconstruction Bureau

Dear Mr. Anderson:

We have reviewed the Draft Environmental Impact Statement for Elmo-Rollins and Flathead County Line South Highway Construction. From our analysis, it appears that the potential environmental impacts of the proposed action and the reasonable alternatives thereto have been adequately addressed.

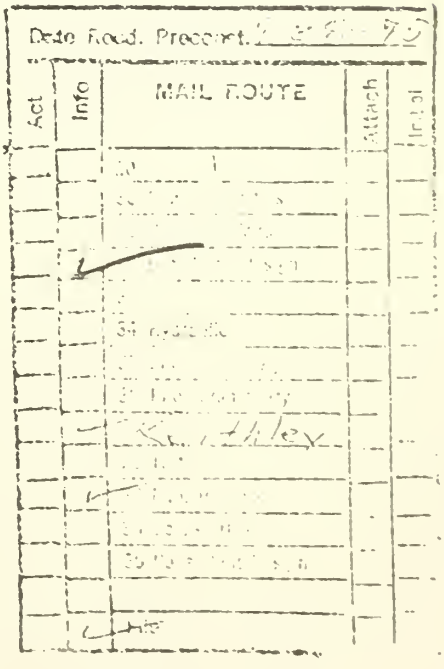
Thank you for the opportunity to comment.

Sincerely,

Rulon R. Garfield
Regional Director

cc: Warren Muir, Council on Environmental Quality, Washington, D. C. (two copies)

Phyllis Hayes, Office of Environmental Affairs, Washington, D. C.

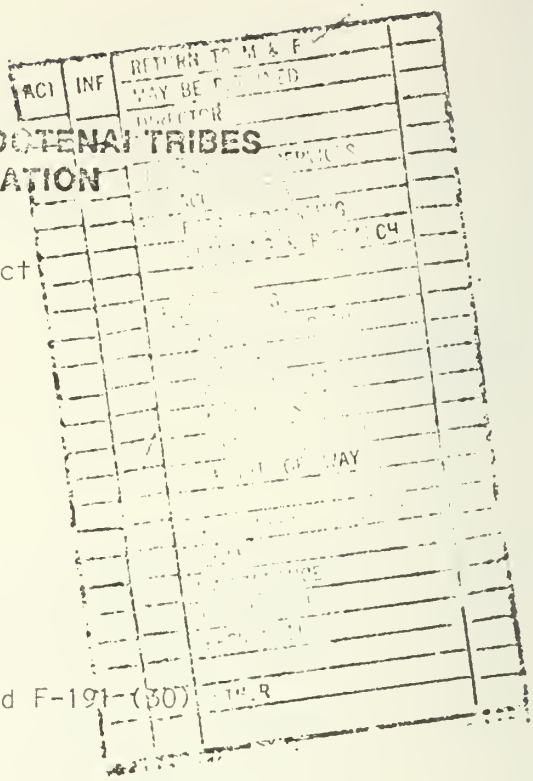




MONTANA HIGHWAY COMMISSION
RECEIVED
JUL 28 1975
HELENA, MONTANA

THE CONFEDERATED SALISH AND KOOTENAI TRIBES
OF THE FLATHEAD RESERVATION
DIXON, MONTANA 59831
701 Planning Project

July 25, 1975



Mr. H. J. Anderson, Director of Highways
Montana Department of Highways
Helena, Montana 59601

ATTENTION: Preconstruction Bureau

Re: Draft Environmental Statement for F-191 (15) and F-191-(30)

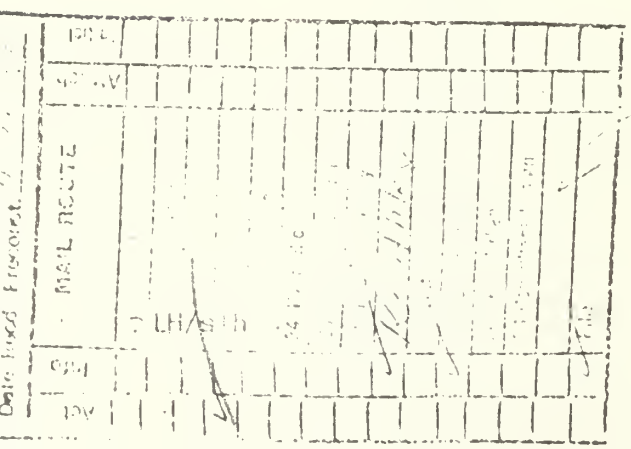
Dear Mr. Anderson:

At the July 9 meeting of the Tribal Planning Board, we reviewed the Draft Environmental Statement for projects F-191 (15) Elmo-Rollins and F-191 (30) Flathead County line South. It was the board's action to recommend Alternative 7 with the modification of using Alternative 4 through the town of Dayton for the F-191 (15) section and Alternative PTW for the F-191 (30) section of the highway.

These recommendations were based on the philosophy that changing the alignment of a major transportation corridor in a rural setting, not only disrupts both natural and human communities within the new corridor, but also spurs erratic growth adjacent to the corridor. Given the quality of the environment in the area of the route, we had but one choice, Alternative 7 with the modification of using alternative 4 through the town of Dayton and Alternative PTW.

We, also, question the construction cost of Alternative 7 in comparison with the other alternatives. We feel there should be a reduction of cost in Alternative 7 because it is presently a road with a portion of the cut and filling necessary, already done. We would like clarification on this subject.

We would, also, like a copy of the Final Environmental Impact Statement for our office.



Sincerely,

Larry Hall
701 Project Director
Confederated Salish & Kootenai Tribes

The alternates selected have been discussed in this environmental statement.

Because of the poor alignment and grades on the present roadway there would not be a great reduction in the grading quantities as a result of Alternate 7. In order to maintain design standards Alternate 7 would not be able to take advantage of all of the existing cuts and fills. For this reason we do not feel Alternate 7 would be significantly cheaper than the other alternates that pass through Dayton.

MONTANA HIGHWAY COMMISSION
RECEIVED
AUG - 5 1975
HELENA, MONTANA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
1860 LINCOLN STREET
DENVER, COLORADO 80203

Ref: 8W-EE

AUG 4 1975

Mr. H. J. Anderson
Director of Highways
Montana Department of Highways
Helena, Montana 59601

Dear Mr. Anderson:

The Environmental Protection Agency has reviewed the draft environmental impact statement on the highway improvement projects F-191 (15) and F-191 (30), Elmo-Rollins and Flathead County Line South. We offer the following comments.

General

The main environmental impacts to be considered from these projects are water pollution, noise, and secondary impacts due to induced growth. Impacts from induced growth can be minimized by maintaining the present road alignment wherever possible, with deviations made only for safety reasons or to lessen environmental impact. (Using these criteria we find Alternate 5 and the Hill alternate to be the least desirable alternatives.)

Noise

Every effort should be made to comply with FHWA noise standards using berms, walls or fences where necessary. In some areas, moderate realignment of the roadway should be considered when it will reduce noise impacts without causing other adverse impacts. The town of Dayton should probably be circumvented to minimize noise impacts and preserve the integrity of the community; however, the realignment need not be as accentuated as Alternative 6.

Water Pollution

The proximity of these projects to Flathead Lake makes water pollution considerations extremely important. Alignment variations from the present roadway should be considered if it is the only way to prevent highway runoff from entering the lake. Since these projects

are in an area of low precipitation, revegetation of highway cuts will take considerable time; therefore, careful planning should be done beforehand to account for this, and the best available erosion-control procedures should be used.

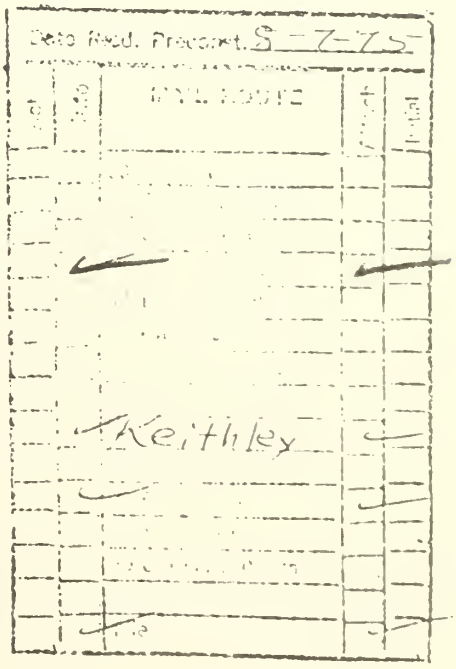
In accordance with the procedure EPA uses to categorize the nature of our comments on environmental statements, the proposed Elmo-Rollins and Flathead County Line South highway projects have been placed in Category LO-1. A copy of EPA's rating system is enclosed.

Thank you for providing us an opportunity to comment on this draft statement. We would be pleased to discuss these comments with you if you have any questions. Please send us three copies of the final environmental statement when it is available.

Sincerely yours,

John A. Green
Regional Administrator

Enclosure



Environmental Impact of the Action

LO--Lack of Objections

EPA has no objections to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

ER--Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to reassess these aspects.

EU--Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed further (including the possibility of no action at all).

Adequacy of the Impact Statement

Category 1--Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2--Insufficient Information

EPA believes that the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3--Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement.

If a draft impact statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make such a determination.

General - The selected alignment generally follows the present roadway except in the Dayton vicinity.

Noise - As indicated in the Alternates section the design noise levels for the F191 (15), Elmo-Rollins section, will not be exceeded because the chosen alternate bypasses Dayton. On the F191 (30), Flathead County Line South portion the allowable noise standards may be exceeded in four locations. As stated in the EIS these conflicts will be within the right-of-way and will have to be moved, thus eliminating the conflict. Because the design noise levels will be within allowable standards for both projects we will be complying with FHWA noise standards.

Water Pollution - The alignments selected will not encroach upon Flathead Lake so there will be no highway runoff directly entering the lake. A paragraph has been added to Section II (B) which discusses revegetation and erosion control.

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON 98134

RECEIVED
AUG 11 1975
HELENA, MONTANA

NPSEN-PL-ER

4 AUG 1975

Mr. H. J. Anderson
Director of Highways
Montana Department of Highways
Helena, Montana 59601

Dear Mr. Anderson:

We have reviewed the draft environmental statement, Administrative Action for Projects F-191 (15) and F-191 (30), Elmo-Rollins and Flathead County Line South. We have no comments with respect to the Corps of Engineers' areas of responsibility for navigation, flood control and hydropower.

Thank you for the opportunity to review this statement.

Sincerely yours,

Frederick Weber

FREDERICK WEBER
Acting Chief, Engineering Division



STATE OF MONTANA

DEPARTMENT OF FISH AND GAME

Helena, Montana 59601

August 15, 1975

Mr. H. J. Anderson, Director
Department of Highways
Helena, Montana 59601
Attention: Robert Hall

Dear Mr. Anderson:

Attached is a copy of our Kalispell region's recommendations concerning the Location Study Report for projects F 191 (15), Elmo-Rollins, and F 191 (30), Flathead County Line - South. The comment on photo four by game management applies also to photo five, not just that project section of photo four.

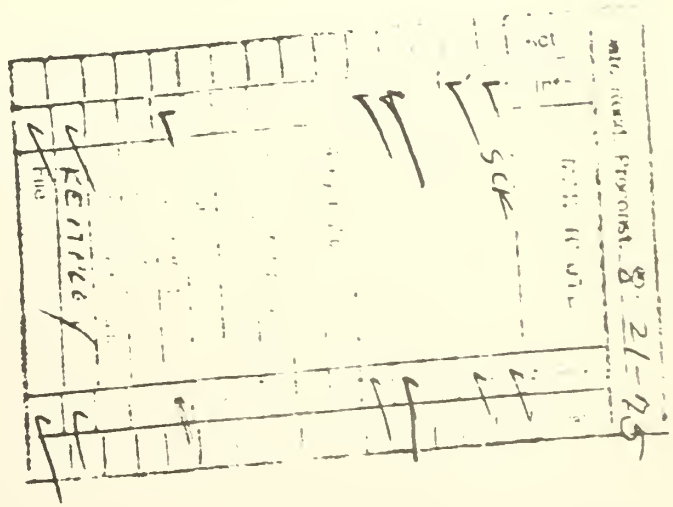
We concur with your decision to place the crossing of Dayton Creek on the lake side of the PTW, if the existing crossing location cannot be used.

Sincerely,

R. W. Boland

Ralph W. Boland, Assistant Administrator
Environment and Information Division

RWB:ale
Attachment
cc: Tom Hay,
attn: staff



STATE OF MONTANA
DEPARTMENT OF FISH AND GAME
HELENA, MONTANA

RECEIVED
AUG 14 1975
STATE OF MONTANA
FISH & GAME DEPT.

Office Memorandum

TO : Wes Woodgerd Attn: Ralph Boland DATE: Aug. 12, 1975

FROM : Tom Hay

SUBJECT: Highway Projects --- F191(15) and F191(30)

The following are recommendations from the Region One Game Management and Fisheries personnel concerning road alignment of Highway #93 in the Elmo-Rollins and Flathead County-South Projects:

Game Management

Photo 1 - Alternate 1
Photo 2 - Alternate 2 or 4
Photo 3 - Alternate PTW, any of the hill routes will take out winter game range.
Photo 4 - Alternate PTW, it will take out the least winter game range.

Fisheries

Only comments are on the crossing of Dayton Creek. Crossing should be made on existing road and avoid temporary crossings.

Tom Hay

TH/ea

Encls.

The alignment selected crosses Dayton Creek approximately 1000 feet upstream from the existing highway. This crossing is far enough upstream that it will not cross the wetlands just upstream from the existing crossing.

Form DOT F 1320.1 (6-67)

UNITED STATES GOVERNMENT

DEPARTMENT OF TRANSPORTATION

Memorandum

RECEIVED OFFICE OF THE SECRETARY

'75 JUL 23 AM 10:31

DATE: JUL 22 1975

SUBJECT: Draft Environmental Impact Statement: F-191(15) & (30), U.S. Highway 93, Lake County, Montana FHWA-MONT-EIS-75-01-D

In reply refer to: TES-70

OFFICE OF ASSOC. ADMIN. FOR RIGHT-OF-WAY & ENVIRONMENT, FHWA

FROM : Assistant Secretary for Environment, Safety, and Consumer Affairs

TO : Chief, Environmental Programs Division
Federal Highway Administration, HEV-10

This office has reviewed the draft environmental impact statement (EIS) for the Elmo-Rollins and Flathead County Line South project, which is an improvement project designed to upgrade a 13-mile stretch of U.S. Highway 93 in Lake County, Montana. This section of highway will be replaced by new construction with new right-of-way alignments used in some areas.

Generally, we found the draft EIS quite professional, and major environmental issues are faced and discussed. Especially good are the attempts to predict the effects of the various route alternatives upon land uses. The final EIS should provide additional information on two problems raised by the draft EIS.

1. Water Pollution

 All alternatives for this project involve new stream crossings. The final EIS should carefully examine the potential adverse effects of these crossings both upon the streams themselves and upon Flathead Lake. Methods to control these adverse effects could be discussed if they exist.

2. Flathead Indian Reservation

 The letter in the draft EIS from the representative of the Salish and Kootenai Tribes (page 156) indicates a desire to minimize the taking of tribal land for the project. This desire springs from the cultural value of the land to the tribe more than its economic value. This factor would be well to consider in weighing the alternative routes.

We appreciate this opportunity to comment upon the draft EIS.

Ben Davis

Benjamin O. Davis, Jr.

1. Water Pollution - The selected alternates do not encroach upon Flathead Lake so there should be no adverse effect to the lake. Methods to control adverse effects of the stream crossings are discussed in Section II (A).

2. Flathead Indian Reservation Alternate 6 was chosen and modified so that it will not cross tribal lands. No Indian land will be required for this project.

United States Department of the Interior
OFFICE OF THE SECRETARY
MISSOURI BASIN REGION

BUILDING 67, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

IN REPLY REFER TO:
ER-75/620

AUG 15 1975

Mr. Harold N. Stewart, Division Engineer
Federal Highway Administration
501 North Fee Street
Helena, Montana 59601

Dear Mr. Stewart:

We have reviewed the draft environmental statement for the proposed improvement of U.S. 93, Lake County, Montana (Projects F-191(15) and F-191(30)). Our comments follow.

General Comments

The subject draft environmental statement does not satisfactorily describe the proposed highway improvement nor does it adequately address the environmental concerns of this Department. This is due to the description of both the proposed project and the existing environment in the same section, the description of the proposed alternates in a separate section later in the draft, the omission of certain quantitative and qualitative information, and inadequate maps and graphics. Our specific comments below will discuss those areas where further textual and graphic information should be provided in the final statement.

Specific Comments

1. Description of the Proposed Action

The description of the proposal in the draft statement is extremely vague and confusing, due principally to the inclusion of information on the existing environment and the omission of information on the proposed alternates. In addition, the two maps provided in the exhibits section are too large in scale to be useful for review purposes, show different locations for the northern terminus, and omit the only reference point for the northern terminus given in the text, the Flathead-Lake County line.

We suggest that the proposed action be described separately in the first section of the statement. This section should include an accurate description of the project locations and termini, descriptions of the existing highway and proposed alternates, detailed maps (perhaps in segments) which are small enough in scale to show the relationship

of the existing highway and the proposed alternates to features of the existing environment, right-of-way widths of both the existing highway and the proposed alternates, a typical cross-section of the proposed highway improvement, a textual or graphic description of the proposed structure at the crossing of Dayton Creek, and design detail for those segments of the proposed alternates which are adjacent to the Juniper Beach Fishing Access Site and West Shore State Park, including provisions for access.

The study corridor is defined in the draft as stretching from Missoula to the U.S.-Canadian border, an area which is obviously too large for the purposes of locating 13 miles of highway improvements between previously completed projects. The study corridor should include the actual boundaries within which alternate locations were considered, logical termini for through traffic such as the junctions with other primary or secondary highways, and any significant generators or destinations for traffic within the project area (FAS 352 and Lake Mary Ronan, West Shore State Park, the higher density housing areas, etc.). A more concisely defined study corridor will allow more precise, detailed analysis of the environmental impacts resulting from the proposed action. – See EIS pg 12-13

2. Description of the Existing Environment Pg S - 35

The description of the existing environment should be organized as a separate section in the final environmental statement and should include the following additional information: a description and map of soil types and soil capabilities along each of the proposed alternates, a discussion and map of the existing 70 dBa noise contours for U.S. 93, an analysis of traffic data which indicates approximate percentages of through traffic and local traffic, and a discussion of and quantitative information on existing access and recreation use of the Juniper Beach Fishing Access Site, Lake Mary Ronan State Park, and West Shore State Park. – See EIS pg 12 + 13

3. Probable Environmental Impact of the Proposed Project

As you are aware, any taking of public parklands from the Juniper Beach Fishing Access Site or West Shore State Park will necessitate compliance with Section 4(f) of the Department of Transportation Act, as amended. In addition, the Montana Department of Fish and Game has received Federal financial assistance under the Federal Aid in Fish Restoration Act for the acquisition of the Juniper Beach Fishing Access Site, and under the Land and Water Conservation Fund Act for the development of West Shore State Park. Both Acts require the approval of the Secretary of the Interior before a change in the designated land use may occur.

Mr. Harold N. Stewart, Helena, Montana

The final environmental statement should include detailed design which demonstrates that the above-mentioned areas will not be infringed upon by the proposed highway improvements. If these lands cannot be avoided, it will be necessary for the Federal Highway Administration to circulate a Section 4(f) determination to this Department and initiate a request for a change in land use through the Montana Department of Fish and Game. If necessary, both of these measures should be taken prior to the publication of the final environmental statement, and evidence of further consultation should be included in that statement in order to provide documentation that no outstanding conflicts remain with respect to Section 4(f) and Federal-aid fish restoration and outdoor recreation lands.

We are pleased to note that the Montana Department of Highways has coordinated project planning with the Flathead Tribal Council. Should either Alternate 5 or Alternate 6 be selected and require new right-of-way across Indian lands within the Flathead Indian Reservation, the provisions of 25 CFR 161 (especially subsections .15, .3(a), and .4) may be applicable. In that event, the final statement should contain evidence of further consultation with the Flathead Tribal Council and the Bureau of Indian Affairs, Billings Area Office, 316 North 26th Street, Billings, Montana 59101.

The final environmental statement should provide more precise information concerning noise impacts of the proposed projects. We suggest the inclusion of a map (or maps) depicting the 70 dBa noise contours for each of the proposed alternates at design year traffic levels.

With respect to the bridge crossing of Dayton Creek, the draft statement indicates that, for Alternates 1, 2, 3, 4, and 7, the siting of the bridge either upstream or downstream would involve significant environmental impacts. The draft, however, gives very little specific information about either location. Since the siting of the bridge is apparently unrelated to the selection of alternates, except Nos. 5 and 6, it would be advisable to provide more definite information on the actual location of the bridge and the environmental impacts associated with its construction.

If the new bridge is placed upstream from the existing structure, the draft indicates that the approach would cross a "long, swampy area" and "would eliminate an area that may be suitable for waterfowl" (p. 44, par. 1). The final statement should describe the existing environment in more detail, including the size of the swampy area and the wildlife species inhabiting the area, and more accurately analyze the potential impacts of the project on the area.

Mr. Harold N. Stewart, Helena, Montana

If the new bridge is placed downstream, the draft states that "the fills for the approach to the bridge will extend out into the lake" (p. 44, par. 1). The final statement should describe the lakeshore which would be eliminated and what recreational use, if any, the area currently supports. If this route is selected, the character of the fill material should be described, appropriate mitigating measures to protect the face of the fill from wave erosion should be outlined, and any potential impacts of the project on present and future use of the lakeshore should be analyzed in detail.

There is no discussion in the draft of proposed measures to mitigate the impacts associated with deer-car collisions and the introduction of pollution into Flathead Lake which could result from construction activities. Such impacts to fish and wildlife can be prevented or mitigated if proper attention is given to these concerns. We suggest close cooperation with the Montana Department of Fish and Game during continued project planning and construction. Evidence of consultation with that agency concerning mitigating measures should be included in the final environmental statement.

The final environmental statement should indicate the volume of earthwork which will be required for each of the proposed alternate alignments, the type of material to be excavated, and the proposed sites for the borrow of fill or disposition of spoil.

The draft environmental statement indicates, on page 14, that at least 16 archeological and historical sites have been identified in the immediate vicinity of the project. We also note the following comment in a letter of April 2, 1974, from Dr. Floyd W. Sharrock, Director of the Statewide Archeological Survey, to the Montana Department of Highways (p. 144): ". . . informants in our department indicate that this area is a site rich area, and it is likely that there are many sites as yet unrecorded."

Due to the likelihood that cultural sites may be encountered in the project area, we suggest that a professional archeological field survey be made along the selected alternate alignment prior to construction. Such a survey should include the proposed highway right-of-way and all associated features such as borrow and spoil disposition areas, utility relocations, etc. The final environmental statement should contain either the results of an archeological survey or assurances that a survey of the selected alignment will be made. The final statement should also discuss the procedures to be followed in the event that previously unknown archeological resources should be encountered during project construction.

Mr. Harold N. Stewart, Helena, Montana

The draft statement does not establish that the National Register of Historic Places has been consulted with respect to the 16 identified cultural sites or any others which may exist in the area. Since all properties on the National Register are published in the Federal Register, the Federal Highway Administration should consult the issue of February 4, 1975, and all subsequent monthly supplements which are published on the first Tuesday of each month. Evidence of such consultation should be included in the final statement.

In addition, the State Historic Preservation Officer for the State of Montana, Mr. Ashley C. Roberts, should be consulted with respect to any cultural sites which may currently be nominated to or eligible for nomination to the National Register of Historic Places. We noted reference, in a letter dated March 20, 1974, from Mr. Wesley R. Woodgerd, Director of the Montana Department of Fish and Game (p. 139), to a previous letter from Mr. Roberts to the Montana Department of Highways, on January 22, 1974. The letter from Mr. Roberts should have been included in the draft statement. The final statement should definitely include evidence of consultation with Mr. Roberts concerning nominated or eligible National Register sites.

In the event that any of the currently known sites or additional sites discovered during a survey appear to be potential National Register sites, they should be nominated to the Register in accordance with Section 2(b) of Executive Order 11593. We suggest that such determinations as may be necessary should be made prior to the commencement of construction, pursuant to the procedures outlined in Section 771.20(c) of Federal Highway Administration Guidelines.

If the survey, consultations, and determinations mentioned above should identify any National Register sites which will be affected by the proposed improvements, it will be necessary for the Federal Highway Administration to comply with Executive Order 11593, Section 106 of the National Historic Preservation Act of 1966, and the Advisory Council on Historic Preservation's "Procedures for the Protection of Historic and Cultural Properties" (36 CFR, Part 800).

Sincerely,

John E Rayburn

for Special Assistant
to the Secretary

cc: Federal Highway Administration, Region 8, Denver, Colorado
H. J. Anderson, Montana Department of Highways, Helena, Montana

Specific Comments

1. Description of the Proposed Action

We believe that the format of the Draft EIS was adequate and understandable. The majority of the replies to the Draft EIS indicates this to be the case and, therefore, the format was not changed.

Because this project is not yet in the design phase there are no smaller scale maps available and we must continue using the same mapping. Section I(A) has been expanded to give a more exact description of the termini of the projects. The maps have also been corrected so they show the same exact northern terminus which is one mile south of the Lake County - Flathead County line. The maps do not go far enough to include the county line.

Most of the information that is recommended to be included in the first section is included elsehwere in the statement. Right-of-way widths for the proposed projects will vary and are not known at this time. A general description of the Dayton Creek crossing is given in Section II (A). Because the type of structure to be used is not known at this time and design has not yet begun a more accurate textual or graphic description is not possible. The design of these projects will not begin until this Final Environmental Statement is completed and approved. Therefore, there are no design details available.

The project location is shown in the Exhibits.The locations of the alternates studied are also shown on the Exhibits. Junctions with other primary or secondary highways together with significant generators and destinations for traffic are described in Section I(F)1.

2. Description of the Existing Environment.

As stated previously we feel the format of the Draft Environmental Statement was adequate and it has not been changed.

The soils and geology along the project route are discussed in Section I (F) 4. "Geology." The soils do not vary significantly from alternate to alternate and are, therefore, not discussed individually for each alternate. The Soil Conservation Service is in the process of developing soils maps in the project area but there are presently none available.

Section I (F) 12 has been added which briefly discusses estimated noise levels on the existing highway. Because noise levels do not vary significantly along the existing roadway we do not feel a map of the 70 dBA noise contours would be meaningful. Also a Noise Study Report has been included in the Exhibits.

No origin-destination studies have been made in the vicinity of these projects so no accurate estimate of the percentages of through and local traffic can be made.

Additional information on the amount of use of the state parks in project vicinity has been added in Section I.

3. Probable Environmental Impact of the Proposed Project.

Detailed design demonstrating that the proposed projects do not encroach upon 4(f) lands is not available at this time. However, field reviews have indicated that there is sufficient room for the proposed improvements without infringing upon 4(f) lands. If, during the design process it becomes apparent that for some extraordinary reason 4(f) lands will be encroached upon a 4(f) statement will be processed.

The Noise Study Report included in the Exhibits section provides more precise noise information for the selected alternates and the present highway.

The environmental impacts associated with the Dayton Creek crossing have been discussed in the alternates section. The selected alternate crosses Dayton Creek far enough upstream from the existing bridge that the swampy area will not be affected.

The selected alternates will not encroach upon the Flathead Lake shore.

Close cooperation will be maintained with the Fish and Game Department during project development. They will be invited on all field reviews and they must also approve the final plans before construction may begin.

Earthwork quantities have been added to the table of impact incidents. Both jobs will be "balanced so there will be no borrow or excess material. The type of material is duscussed in the Geology Section.

The manner in which all archaeological sites, both known and unknown, will be disposed of has been discussed in Section II B. This section also documents the fact that the National Register of Historic Places and the State Historic Preservation Plan have been consulted and that no listed properties will be affected.

The State Historic Preservation Officer has been consulted concerning historic and cultural sites. Proof of this consultation is included in the Coordination With Others section.

IX. PUBLIC HEARING SUMMARY

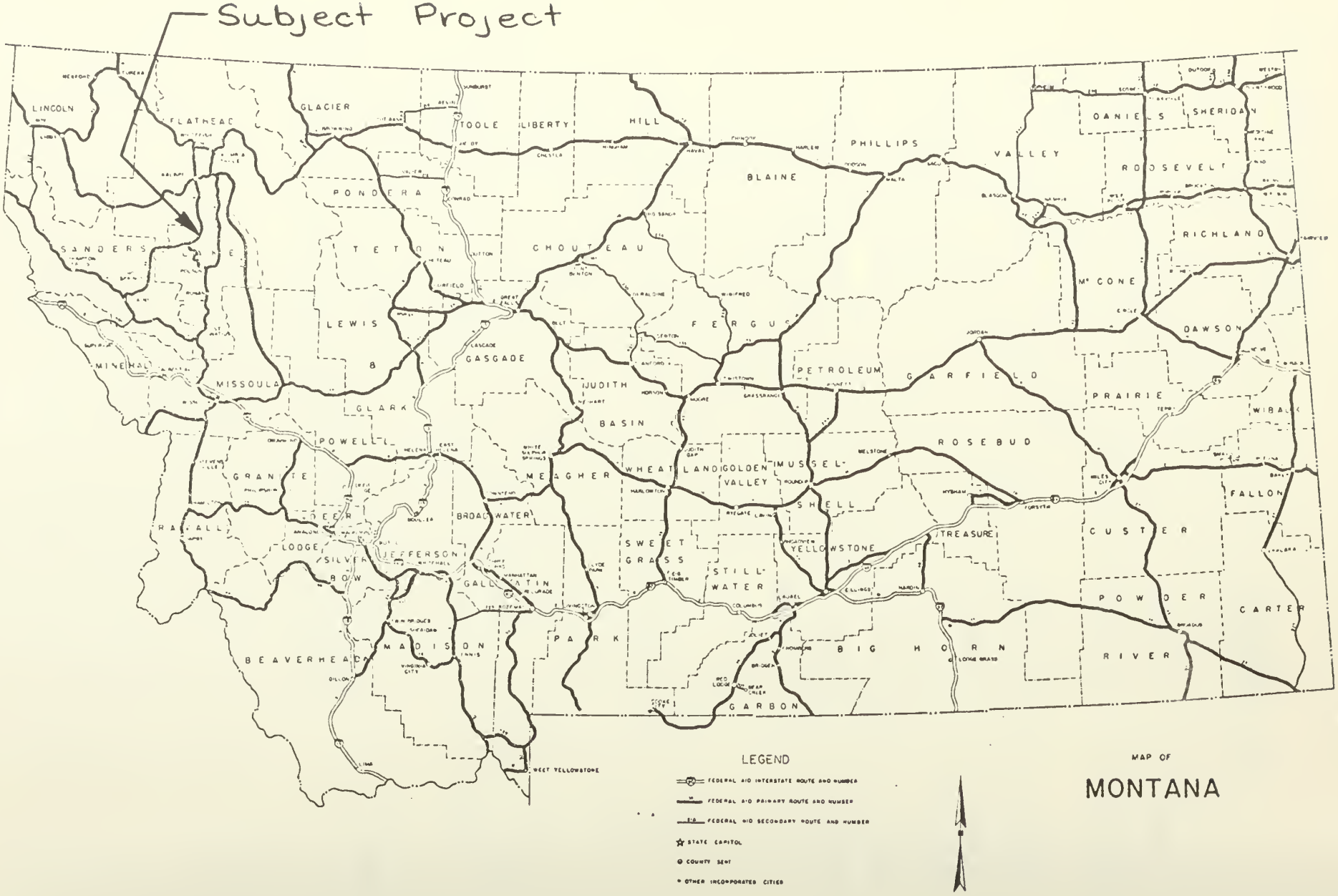
A corridor public hearing was held on the subject highway projects in the Gymnasium of the Lakeside School in Lakeside on Wednesday, September 3, 1975 at 7:30 P. M. Approximately 122 people attended the hearing. All of the alternates discussed in this environmental statement were presented.

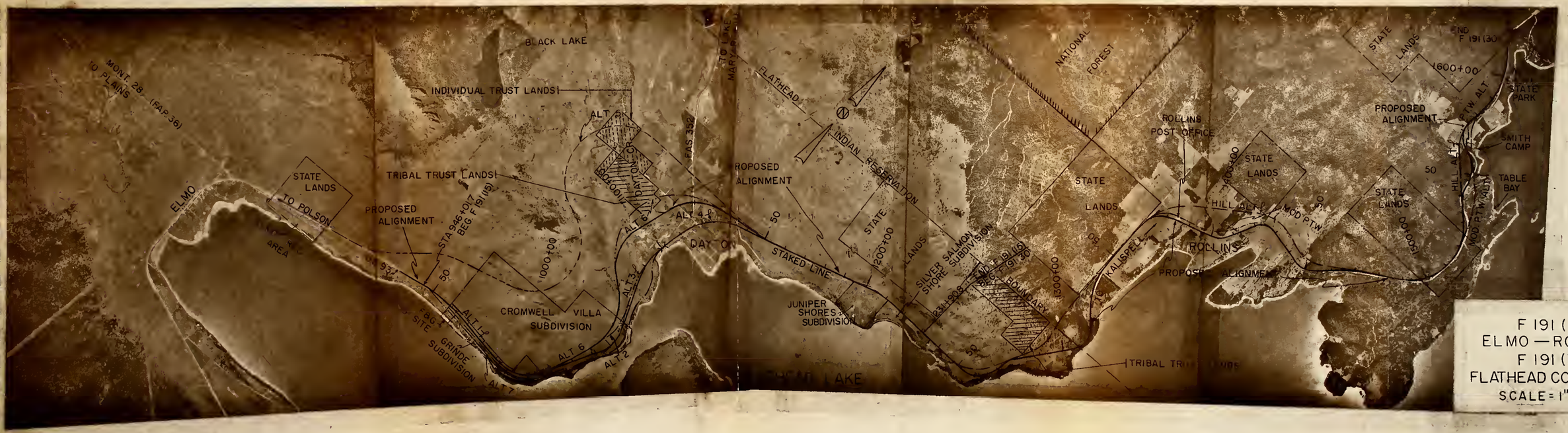
In all of the comments that were received, both written and oral, there was no consensus as to which alternate should be constructed. The largest number of people favored either Alternate #5 or Alternate #1 for the Elmo-Rollins project. However, there were people favoring almost every alternate presented. The majority of people who commented on the Flathead County Line-South project favored the PTW Alternate, although some favored the Hill Alternate.

Two people suggested that an alternate even further west than Alternates #5 and the Hill Alternate be considered. Further study indicated that rough terrain would make it difficult to maintain design standards and would drive construction costs way up. This alternate would also necessitate the maintaining of two highways. For these reasons no further consideration was given to this suggested alternate.

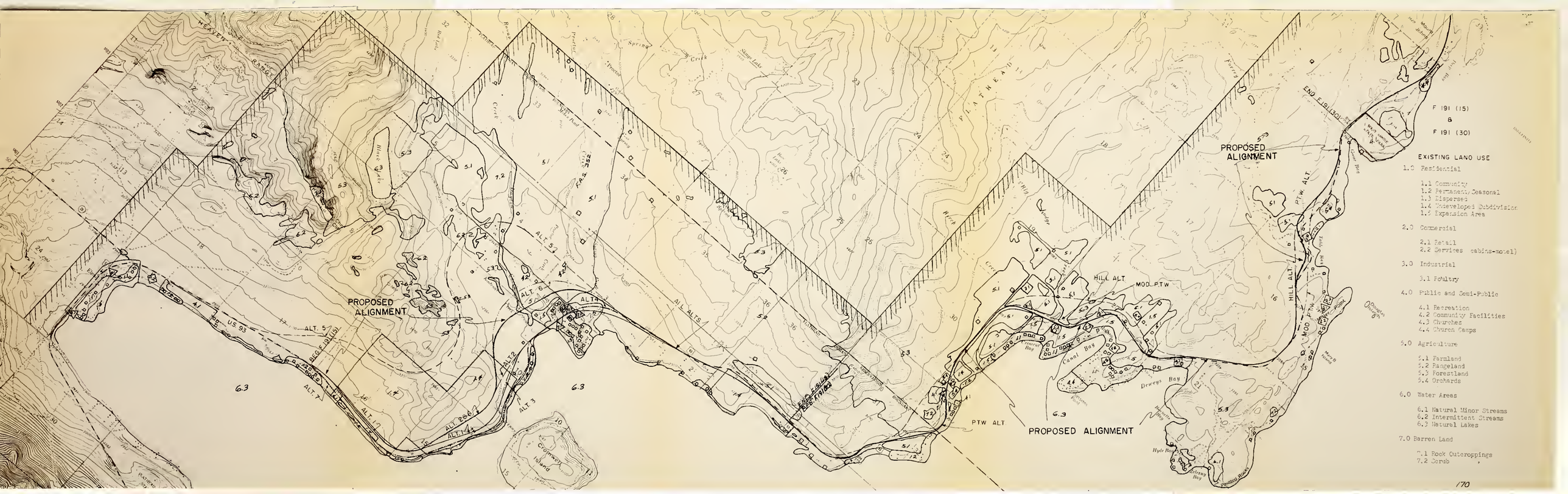
No environmental issues not already discussed in this Environmental Impact Statement were brought up during the hearing.

X. EXHIBITS


Subject Project
LINCOLN
FLATHEAD
GLACIER
TOOLE
LIBERTY
HILL
PHILLIPS
VALLEY
DANIELS
SHERIDAN
ROOSEVELT
BLAINE
PONDERA
SANDERS
TETON
CHOUTEAU
RICHLAND
McCONE
LEWIS & CLARK
FERGUS
DAWSON
MINERAL
MISSOULA
CASCADE
JUDITH BASIN
PETROLEUM
GARFIELD
PRAIRIE
WIBAUX
POWELL
ROSEBUD
GRANITE
MEAGHER
WHEATLAND
GOLDEN VALLEY
MUSSELSHELL
FALLON
DEER LODGE
SILVER BOW
BROADWATER
JEFFERSON
SWEET GRASS
STILLWATER
YELLOWSTONE
TREASURE
CUSTER
GALLATIN
BEAVERHEAD
MADISON
PARK
BIG HORN
POWDER RIVER
CARTER
GARBON
WEST YELLOWSTONE
LEGEND
FEDERAL AID INTERSTATE ROUTE AND NUMBER
FEDERAL AID PRIMARY ROUTE AND NUMBER
FEDERAL AID SECONDARY ROUTE AND NUMBER
STATE CAPITOL
COUNTY SEAT
OTHER INCORPORATED CITIES
MAP OF
MONTANA



F 191 (15)
ELMO — ROLLINS
F 191 (30)
FLATHEAD CO. LINE SO.
SCALE = 1" = 2000' ±


PROPOSED ALIGNMENT
ALT. 5
BEG. F 191(15)
US 93
ALT 7
ALT 7A
ALT 7B6
ALT 2
ALT 3
ALT 4
ALT 5A
ALT 6
ALL ALTS.
Crimmon Island
END F 191(30)
PTW ALT
HILL ALT
MOD. PTW
PROPOSED ALIGNMENT
Canal Bay
Dewys Bay
Hyde Bay
Calvary Bay
Spring Creek
Stony Lake
Flathead River
Hungry Horse Reservoir
HEAVEN'S PEAK RANGE
F 191 (15)
&
F 191 (30)
EXISTING LAND USE
1.0 Residential
1.1 Community
1.2 Permanent/Seasonal
1.3 Dispersed
1.4 Undeveloped Subdivision
1.5 Expansion Area
2.0 Commercial
2.1 Retail
2.2 Services (cabins-motel)
3.0 Industrial
3.1 Poultry
4.0 Public and Semi-Public
4.1 Recreation
4.2 Community Facilities
4.3 Churches
4.4 Church Camps
5.0 Agriculture
5.1 Farmland
5.2 Rangeland
5.3 Forestland
5.4 Orchards
6.0 Water Areas
6.1 Natural Minor Streams
6.2 Intermittent Streams
6.3 Natural Lakes
7.0 Barren Land
7.1 Rock Outcroppings
7.2 Scrub

NOISE STUDY REPORT
F 191(15) Elmo - Rollins
F 191(30) Flathead County Line South

SCOPE:

This noise study report was conducted to evaluate the impact of the highway noise along the proposed new reconstruction, as per Volume 7, Chapter 7 of the Federal Aid Highway Program Manual. The projects are major reconstruction projects with no access control and are therefore classified as 1B projects.

The noise study consisted of ambient noise studies at twelve (12) sites along the proposed route, and counts were made of the existing traffic, breaking out the truck and other vehicle totals. The NCHRP 117 prediction method has been utilized in this noise study report.

LAND USE:

This roadway generally parallels the shore of Flathead Lake. The land on the lake side of the roadway is for the most part lake shore frontage and used for summer and permanent homes. The opposite side of the roadway is basically grazing land with a few home sites. Along both sides of the roadway orchards and agriculture uses are presently scattered along the route.

The land conformation is such that land along the lake shore is depressed from the roadway elevation and therefore is shielded somewhat from the highway noise. That land away from the lake is higher than the roadway elevation and therefore no shielding effect is noted.

AMBIENT TRAFFIC NOISE:

The ambient traffic noise was determined from 12 ambient noise studies taken along the present traveled way. These noise recordings were taken at various locations to determine the ambient noise levels for all types of land use present. The ambient noise readings at a distance of 100 feet from centerline range from 56.0 dBA to 64.5 dBA. These ambient noise readings agree basically with noise levels developed from the NCHRP 117 prediction method for the speeds and traffic volumes recorded during each study.

(cont'd)

Of interest is the 2-3 dBA decrease in the ambient noise levels from the predicted noise levels at the locations where the land is depressed below the roadway. The roadway in fact provides a noise barrier for the land on the lake side or the prime recreation development areas.

Listed below are the ambient noise levels obtained at each station:

Station 1 - Approximately 2400' from Beginning F-191(15)
At summer homes in Cromwell Villa Subdivision
Approximately 65' east of centerline

Ambient noise reading L_{10} = 63.7 dBA
Adjusted to 100' east of centerline L_{10} = 62.7 dBA

Station 2 - Approximately 2900' from beginning of F-191(15)
At summer homes in Cromwell Villa Subdivision
Approximately 52' west of centerline

Ambient noise reading L_{10} = 67.5 dBA
Adjusted to 100' west of centerline L_{10} = 64.5 dBA

Station 3 - Approximately 1.2 miles from beginning of F-191(15)
At undeveloped lake shore land
Approximately 100' east of centerline

Ambient noise reading L_{10} = 63.5 dBA
Adjusted to 100' east of centerline L_{10} = 63.5 dBA

Station 4 - Approximately 4300' south of Dayton
At a home on east side of roadway
Approximately 104' east of centerline

Ambient noise reading L_{10} = 59 dBA
Adjusted to 100' east of centerline L_{10} = 60 dBA

Station 5 - At the school in Dayton
Approximately 195' west of centerline

Ambient noise reading L_{10} = 56.5 dBA
Adjusted to 100' from centerline L_{10} = 61 dBA

(cont'd)

Station 6 - At Juniper Shores Subdivision
Approximately 175' east of centerline

Ambient noise readings L_{10} = 52.5 dBA
Adjusted to 100' from centerline L_{10} = 56 dBA

Station 7 - Silver Salmon Shore Subdivision
Approximately 135' east of centerline

Ambient noise levels L_{10} = 58 dBA
Adjusted to 100' from centerline L_{10} = 61 dBA

Station 8 - Near Kim'sMeats - a commercial establishment
Approximately 1.7 miles north of beginning of F-191(30)
Approximately 90' west of centerline

Ambient noise level L_{10} = 63 dBA
Adjusted to 100' from centerline L_{10} = 62 dBA

Station 9 - At the Rollins Post Office
Approximately 65' west of centerline

Ambient noise level L_{10} = 61.5 dBA
Adjusted to 100' from centerline L_{10} = 59 dBA

Station 10 - At the old Rollins Post Office
Approximately 36' east of centerline

Ambient noise level L_{10} = 66.5 dBA
Adjusted to 100' from centerline L_{10} = 60 dBA

Station 11 - At Smith's Camp
Approximately 80' east of centerline

Ambient noise level L_{10} = 64.5 dBA
Adjusted to 100' from centerline L_{10} = 63.5 dBA

Station 12 - Approximately 5.9 miles north of beginning of F-191(30)
Approximately 144 feet east of centerline

Ambient noise level L_{10} = 56 dBA
Adjusted to 100' from centerline L_{10} = 59 dBA

(cont'd)

The above data indicates that traffic noise on the present traveled way is not approaching the 70 dBA limits for recreational and home sites. The alignment of the proposed route generally follows the present traveled way with a few minor alignment changes. For the most part alignment changes will make fewer noise sensitive areas by separating existing homes and recreation areas from the highway. In addition, the alignment changes will modify both the vertical and horizontal alignments, thus lessening the vehicle load and the overall noise generated.

1999 PROJECTED NOISE LEVELS

The traffic data on this project has been projected to 1999. This data was used in the NCHRP 117 prediction method to project traffic noise for the 20 year highway life. The following results have been obtained:

TRAFFIC DATA:

1999 ADT = 3160
% Trucks = 13.3
Hourly Volume = 316
Hourly Volume Cars = 274
Hourly Volume Trucks = 42

NOISE DATA @ 100' FROM CENTERLINE:

L_{10} Cars = 63.5 dBA
L_{10} Trucks = 67 dBA
L_{10} Combined = 68.5 dBA

RESULTS AND RECOMMENDATIONS

The above discussion illustrates that the existing noise levels and the expected noise levels are well below the 70 dBA limits for residential and recreational lands, which does exist along this roadway. As stated earlier, the majority of the residential and recreational lands are below the roadway level which will reduce noise levels since the roadway itself will act as a noise barrier. The new alignment will modify the vertical and horizontal alignment making less severe hills and curves thus making a situation which will be expected to produce less truck noises due to gearing.

Since there is no reason to believe that the proposed project will produce noise levels detrimental to the environment, no abatement measures will be explored. Noise abatement will not be a consideration on this project.


THE GREAT SEAL OF THE STATE OF MONTANA
ORO
-Y-
PLATA